

AUTOMOTIVE INDUSTRIES

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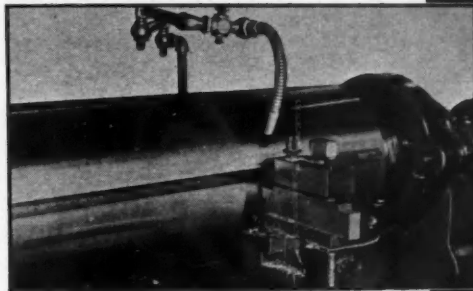
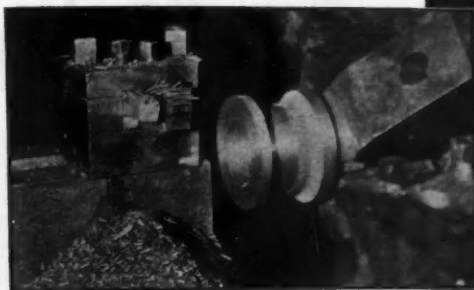
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Automotive Industries



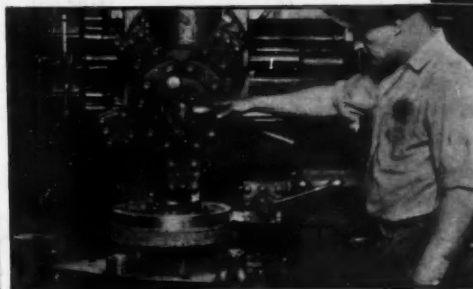
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A Great Industry—A Major Factor In National Recovery

By Julian Chase

NO group in the whole of industrial America has made a greater contribution to the restoration of national prosperity than have the automotive manufacturers. They have earned direct credit for material accomplishment measured in increased employment and extended buying power. They have provided leadership, truly inspiring, by their concrete manifestations of resourcefulness, aggressiveness and courage. All America has benefited by the example they have set. All America has profited by the things that they have done.

In this, the Seventeenth Annual Statistical Issue of *Automotive Industries*, are to be found factual proofs of the industry's progress—statistics, specifications, comparative data. They show the gains that have been made in spite of unprecedented restriction and hindrance, under conditions of inordinate discouragement. They do not show, naturally, so obviously as the truth deserves, the benefits to our entire social-economic system which have resulted from these gains and from the greater value in service to mankind which the industry as a whole has given through its product in return for a reduced reward.

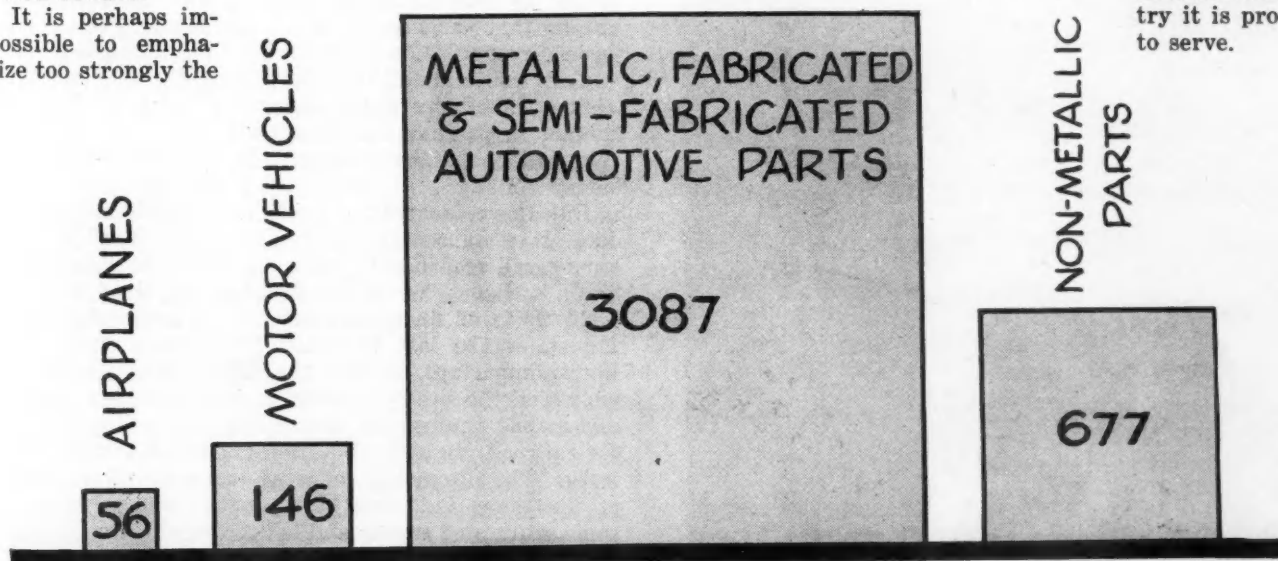
It is perhaps impossible to emphasize too strongly the

importance to our national well-being of the automotive industry with its output, in a year no better than that just passed, running to a wholesale value of approximately two and a quarter billion dollars. On that output excise taxes alone amounting to some sixty-nine million dollars were paid into the national treasury. But that is only the beginning of the story. Besides the four thousand of complete vehicle, parts, accessory, maintenance equipment and other manufacturing companies which make up the industry itself, hundreds of allied but separate and complete industries, even more than normally, in times like these, depend for their opportunity to give and extend employment, upon the manufacture and the sale of automobiles. Thousands of dealers and more thousands of service men with their still more thousands of salesmen and mechanics get from the new car output and the cars in service the means to buy their bread and pay their rent and taxes.

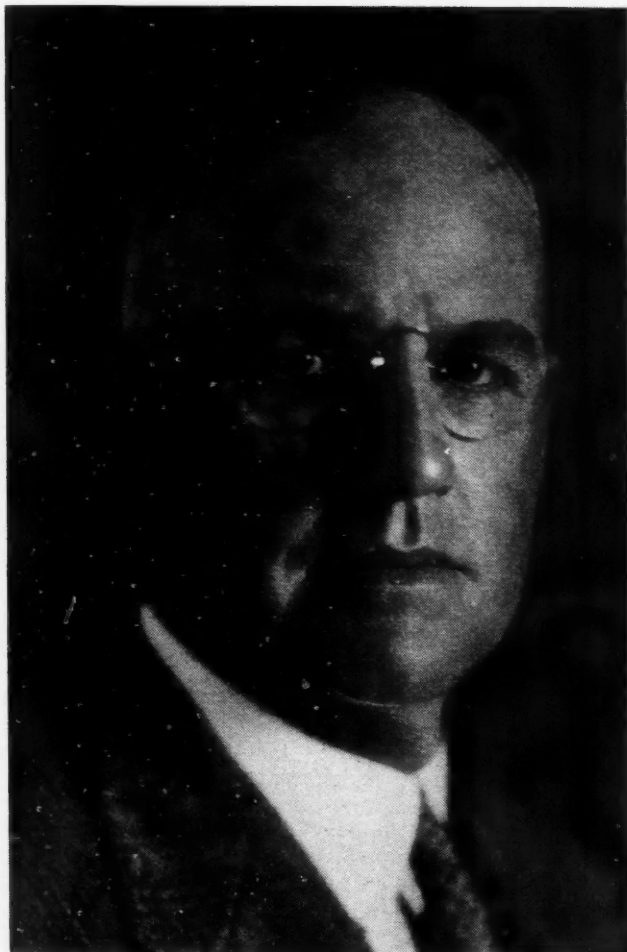
For the welfare of all, for a continuation of the aid and initiative which it has supplied to industry generally, may the progress of the automotive industry be

unimpeded. *Automotive Industries* salutes the industry it is proud to serve.

THE AUTOMOTIVE INDUSTRY



The plants which turn out cars, trucks, buses, tractors and airplanes are but the nucleus of the gigantic organism which is the automotive industry. Besides the manufacturers included in the chart above, there are many more who furnish to the industry raw material, plant equipment and supplies in almost endless variety. Upon the welfare of the automotive industry, the welfare of a substantial portion of all industrial America depends.



Productivity Makes Employment

By Alvan Macauley

President, Automobile Manufacturers' Association;
President, Packard Motor Car Company

WHEN American business can operate profitably the country is going to be more prosperous. These two most desirable elements in business, profits and prosperity, are wedded together by fixed economic laws. There are indications that many barriers to profitable operation of the country's business have been lowered—or are lowering. If this is true it is a distinct note of encouragement as we face a new year.

Productivity in business—all business—increases with profitable operation and business productivity is what this country now needs to put its people back happily at work. It's an all important cycle. Greater productivity gives greater employment and greater employment creates the need for greater productivity. It's to be hoped that no added barrier to profitable operations will be erected in 1935 and that those which may now exist will be leveled.

Certainly, great efforts were made by the automotive industry during 1934 to spur the country's business. They were well directed efforts and had they not been made it is easy to believe 1934 might have dealt less kindly to all business than it did. The spending of millions of dollars by the industry is concrete evidence that courage is not lacking on its part at this time. Efforts are being redoubled.



More Cars—Greater Prosperity

By Roy D. Chapin

Former Secretary of Commerce;
President, Hudson Motor Car Co.

WE are all familiar with statistics showing the really incredible proportion of our population whose livelihood comes, either directly or indirectly, from the automobile industry. This total in itself means that the prosperity of our people and country is in direct relation to the volume of automobile sales—they rise and fall together. Happily they are now rising. The increased buying power provided by automobile wages and commissions is a major factor—unquestionably the greatest—in our successful economic effort.

But there is another point that is of importance, too. It is agreed that a final, soundly-founded prosperity will return only when the heavy industries are again active. The various problems involved, particularly those of financing, necessarily make the heavy industries the last to climb from inactivity. It is highly important, though, that the type of production on which the heavy industries depend be kept active and mobile against the time when they will be needed for railroad, highway, building and other construction work. The automobile industry (actually a first cousin of the heavy industries) fortunately depends on the same sources of supply and is keeping them active and in position to meet the further needs that appear to be not far off.

Automobiles and Steel

By Eugene G. Grace

President, American Iron & Steel Institute;
President, Bethlehem Steel Co.

IN the complex structure of modern industrial civilization, the well-being of one business is closely interrelated with the prosperity of the whole.

In two particulars the advancement of the automobile business has a healthy effect upon the steel industry. The first is obviously in the field of general employment. The steel industry has a normal payroll force of somewhere around 420,000. Activity in the automobile market creates immediately a sizable demand for sheets, alloys, bars and other materials. This is reflected in the pay envelope of the steel worker. Especially in recent years when the men have experienced so much short-time employment this influence is immediately noticeable and gratifying.

There is another factor which has received less attention. The emphasis by the automobile industry on improved steels, accentuating lightness and strength, has been a stimulus to the brain-workers in the steel plants, such as the metallurgists and engineers. This stimulus has been not only in the line of employment but also it has been an inspiration to creative achievement. In adding impetus to scientific advance the automobile industry is contributing to our general economic future, for these developments in motor factory and steel plant become a permanent addition to our storehouse of scientific knowledge.

Contributing to American Progress

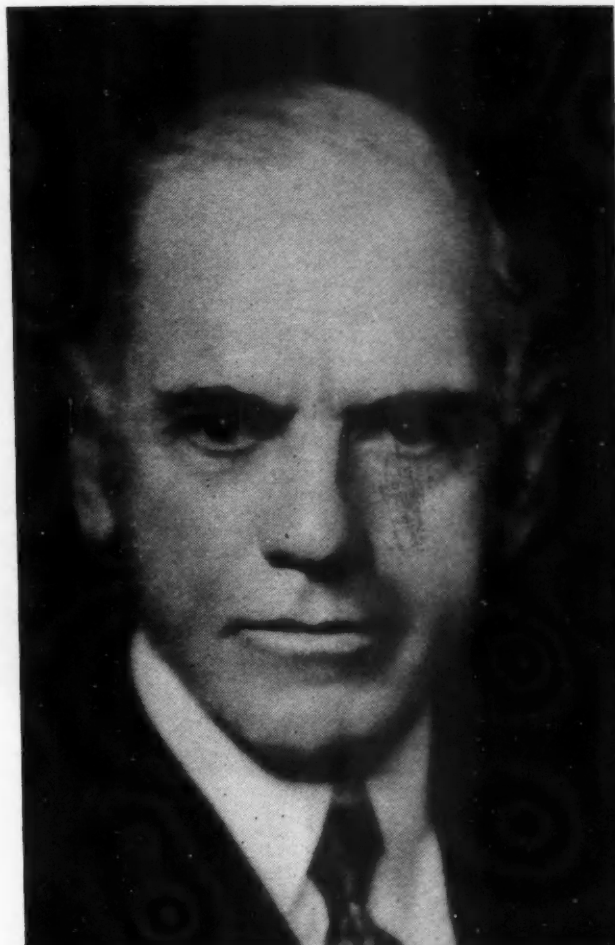
By Walter P. Chrysler

Chairman of the Board, Chrysler Corporation

ONE of the fundamental reasons for the automotive industry's continuing contribution to American progress is its constant effort to improve the automobile itself and thus increase its usefulness. All through the depression, for example, we have not hesitated to invest large sums of money in engineering research and in improving production facilities with a view to bettering design, quality and performance of the car and yet fit it to the pocketbooks of potential purchasers under prevailing economic conditions.

A most significant business indication at any time is the demand for automobiles. Today this index shows unmistakably either a greater buying power on the part of the public or a greater willingness to buy. Perhaps it is both. The fact is that the automobile industry has the largest number of orders on hand since 1929 and is in a better position to fill them promptly.

In its persistent search for a better product, for new and better ways of doing things, looking toward more economical production and operation of automobiles, the motor car industry has greatly stimulated technical development in other complementary industries. The result is that automobile manufacture is not only prepared for business revival, but gives most promise of contributing substantially toward bringing it about.





A Continuous Producer of Wealth

By Henry T. Ewald

President, Campbell-Ewald Company

EVERY motor car that leaves the factory represents money paid for wages and salaries to those who produced it; money paid to a small army of parts and equipment makers scattered throughout the country; money paid to steel, iron and aluminum mills, to lumber mills, to glass and textile mills, to paint and varnish manufacturers and to tire makers.

It is a source of profit to thousands of distributors, dealers and salesmen scattered in every city, town and hamlet in the country.

Once it leaves the salesroom it becomes a five to seven, or even ten years, source of revenue to untold thousands of oil and gas producers, oil and gas distributors, service stations and garages, replacement parts makers, tire manufacturers and many others who contribute to its operation and upkeep.

Probably no other industry contributes to the welfare of so large a proportion of the people, or is so far reaching in its effect upon the prosperity of the nation. Continued increase in motor car production inevitably means a continued upward trend in general business conditions.

This Work Must Go On

By Charles B. Bohn

President, Bohn Aluminum and Brass Corporation

WE are not standing still in the automobile industry. Year by year we are offering the public better cars for less money. This does not necessarily mean that prices will continue to drop but it does mean that the quality of the product per dollar expended will continue to increase. In this betterment of the product many hundreds of parts and material manufacturers will wield a vast and growing influence.

The future business of the automobile industry will be vitally affected by the research work which is being conducted in the laboratories of the parts makers today. A tremendous percentage of the pioneering and experimental work which will determine the major improvements in the coming automobile, is being sponsored by the parts and material manufacturers with the cooperation of the car engineers.

These technical developments are proceeding at a rapid pace. We can definitely state that they will soon obsolete the present type of car. The car of tomorrow will be so much better than anything now available that the greater desirability of the product will be a powerful stimulation to buying, to increased production and, hence, to increased employment.

For the good of everyone this work must go on. It should be given every opportunity to go on in order that it may reach its fullest potentialities as a factor in economic progress, as a contributor to the restoration of national prosperity.



Traffic Control Will Aid Recovery

By Paul G. Hoffman

President, The Studebaker Sales Corp. of America

THE motor vehicle has created a new type of society. Its benefits can be still further enlarged by effective guiding rather than by retributive restriction of its operation.

Control of automobile traffic to prevent accidents and to insure development of maximum economic and social values from automobile use is essential to full business recovery.

Both of these objectives must be achieved if the interests of the whole public are best to be served.

To gain general observance, traffic regulation must permit the fullest possible use of the modern motor vehicle. To safeguard people from accidents, the highway and street conditions surrounding vehicle operation must be studied with that thought in mind. More attention must be concentrated on positive moves for betterment of traffic conditions and less on merely punitive measures taking effect after accidents have happened.

Automobile manufacturers in the future should take a far more active part in practical efforts to achieve these ends than they have thus far. They are face to face with an opportunity as well as an obligation.



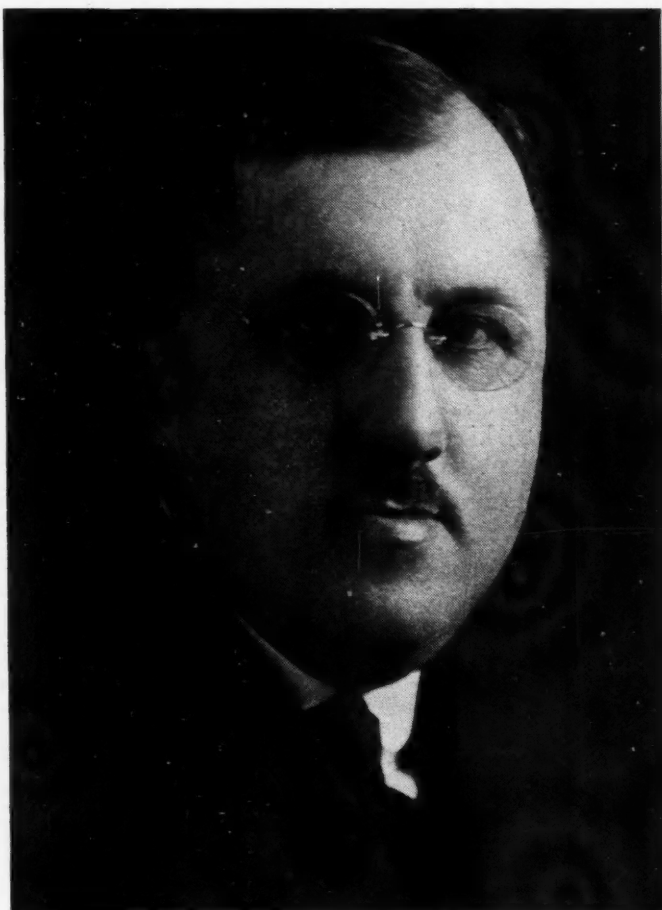
Aid in the Forward March

By Mason T. Rogers

President, Motor and Equipment Manufacturers Association;
Vice-President, Multibestos Co.

I BELIEVE that history will repeat itself and that the automobile industry will continue to lead the march to industrial recovery. I believe that research—the perfecting of new ideas—will be largely responsible for this development. But with the production and sale of over three million vehicles in 1935 (and all that that means in stimulating other industries supplying the automotive) goes the need for adequate servicing of those and the other twenty-two million vehicles operating on the highways. It is the responsibility of the men connected with the after-market activities to keep pace with the research men at the factories to the end that the most modern servicing equipment may be made available and essential service material may reach the ultimate consumer with the least amount of effort and at the lowest possible cost. The solution of these problems will do much to increase the use of automobiles and thus aid in the forward march.





Fundamental Forces for Recovery

By H. L. Horning
President, Waukesha Motor Co.

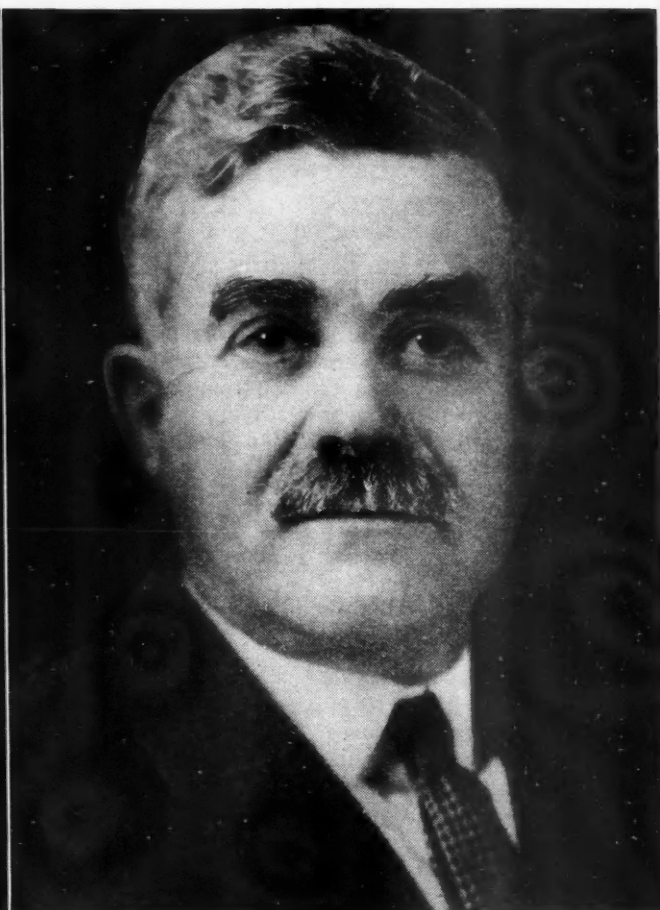
IN the last few months I have personally viewed recovery in Sweden and England, and looking back at the United States from that standpoint and somewhat objectively, the following is my analysis of our economic situation for 1935 and 1936:

The sum of individual effort and courage properly directed, carrying on against all odds, depending on faith rather than certainty in making one desperate try after another, has defeated other depressions. These are the sustaining forces on which our hopes are staked, and they are prevailing against every discouraging obstacle Washington is throwing in the way of business and industry.

Our true economic trend is in the hands of every man, and, while it can be harassed, hindered, aided, and abetted to some extent by politics, it cannot be dominated or stopped by a political party or a President. This is our supreme assurance. A bit of European satire is: "Wouldn't it be too bad if the depression came to an end before the experts found a cure for it."

Markets will dip, industries will stagger, and discouragement will hold back orders, but recovery will march steadily on.

February 23, 1935



New Motor Equipment Needed

By A. J. Brosseau
Vice-President, Automobile Manufacturers' Association;
President, Mack Trucks, Inc.

FROM current sales of gasoline for motor vehicle use it is quite evident that existing equipment is being overworked and that the necessity for replacements, as yet, has been given scant attention.

It is of greatest importance that this second rate keep pace with the first, if we are to preserve proper balance in the economics of highway transportation and help to restore general prosperity.

For the promotion of general safety, the operator of high-grade equipment, which is now over ten years old, owes it to himself and his neighbor either to bring this old equipment up to modern safety standards, or replace it with new equipment.

AUTOMOTIVE INDUSTRIES acknowledges with gratitude the generous cooperation of the statisticians of the industry, here and abroad and of the motor vehicle departments of the various states in the preparation of material for this issue. The statistics and specifications were compiled under the supervision of Marcus Ainsworth, Chilton staff statistician.

Automotive Industries



Buying Power from Shop Equipment

By W. C. Allen

Chairman, Shop Equipment Associates;
Sales Manager, Brunner Mfg. Co.

INCREASED activity in automobile manufacturing has been accompanied by a greater demand for maintenance work which, in turn, has revived interest in and demand for profit producing shop equipment.

Shop equipment—a term generally understood to mean all types of service and maintenance equipment other than hand tools—turned the corner with the rest of the automotive industry in 1934. The best proof of this improvement comes from the increased activity among automotive wholesalers and distributors who once again are looking at their equipment lines as sales and profit producers.

Many thousands of workers are engaged in the manufacture of automotive service and maintenance equipment. More thousands are dependent upon such products for profits in their daily work. The welfare of these many thousands of wage earners, jobbers, dealers and shop owners is intimately related to and dependent on the continued progress of the automotive industry as a whole toward the production volume needed to meet the pent-up demand for essential motor transportation.

A Network of Veins Through Industry

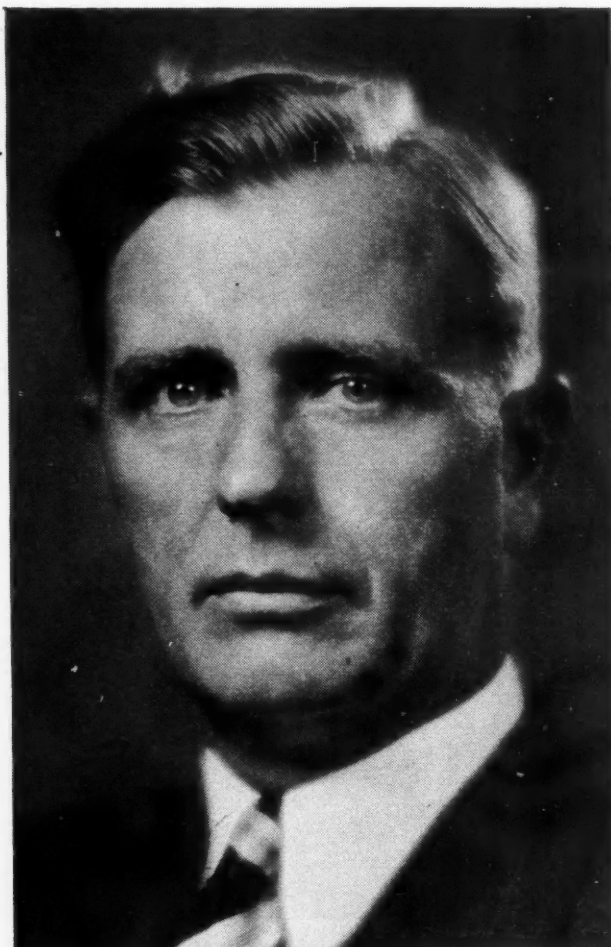
By Royce G. Martin

President, Electric Auto-Lite Co.

INDUSTRY, in general, is heartened by the upturn in motor car production and the optimistic predictions of motor manufacturers regarding 1935 production programs.

In 1922, the automobile led the way to renewed prosperity and there is a very general feeling that this may be the case in 1935, coupled, of course, with reasonable upturn in construction and other capital goods industries. The increased schedules for the car manufacturers spread like a network of veins throughout the entire industrial structure of America. Steel operations have stepped up rapidly recently for which motor car releases have been largely responsible. Our own business has shown the largest volume since 1930.

This increase means increased production for hundreds of other companies who supply us with raw material and that business means releases from them to other hundreds of suppliers of material, so that the billion-and-one-quarter dollar volume of the motor car companies becomes several billions to American industry, a very large part of which is again spent with manufacturers of consumer goods, resulting in an accumulation of business that is more impressive by far than any expenditure by the Federal Government, no matter how big, within reason, it may be.



Recovery Potentialities In Parts Industry

By F. S. Kimmerling

President, AC Spark Plug Co.

THE size of the industry which is devoted to the development of specialized parts for the automobile manufacturer and for the maintenance of the country's 24,000,000 cars and trucks in service is generally not fully appreciated. The annual volume of this group of manufacturers is in excess of one billion dollars.

It is estimated that if the cars now on the roads went into service shops for needed repairs and adjustments, it would require parts, tool and equipment makers two years of 24 hour days to supply service men the tools and parts they need. It would take these men an equal length of time to do the work.



Automotive Activity Spreads Confidence

By Sandford Brown

Vice-President, Bakelite Corp.

I HAVE been impressed during the past month on an extensive trip through the Middle West by the encouragement which has been imparted to manufacturers in allied and even remotely related lines by the sales aggressiveness and production performance of the manufacturers in the automotive industry. In talks with many manufacturing executives, the extent to which the accomplishments of the automotive manufacturers have stimulated them was evident. I am confident that if the predictions of the automotive leaders are realized during this year it will have a most salutary effect upon all industry.

Photo by
Underwood & Underwood

High-Spot Automotive Statistics

The Automotive Industry as a Customer

	Percentage of Total Output Bought by Automotive Industry
Rubber	80%
Plate Glass	70
Steel and Iron	23
Hardwood Lumber	9
Copper	19
Lead	39
Aluminum	23
Nickel	28
Gasoline	85
Lubricating Oil	57

Production Determines Work and Wages (Motor Vehicle Plants Only)

Index Numbers—1929=100				
Year	Employment	Payrolls	Payrolls	Wholesale Value of Motor Vehicle Production
1934	240,000	\$294,500,000	38	41
1933	190,027	233,507,619	30	28
1932	229,800	282,929,203	36	22
1931	270,464	397,207,034	51	40
1930	325,124	647,588,438	83	60
1929	427,459	775,478,810	100	100
1928	402,138	712,567,699	92	88
1927	324,665	585,823,733	76	75

1934 Taxes!

State Gasoline Tax	\$550,000,000
Federal Tax on Gasoline Motor Fuel	150,000,000
Registration and License Fees	300,000,000
Federal Excise Taxes	80,000,000
Personal Property Taxes	80,000,000
Total	\$1,160,000,000

Retail Automotive Employment and Payrolls*

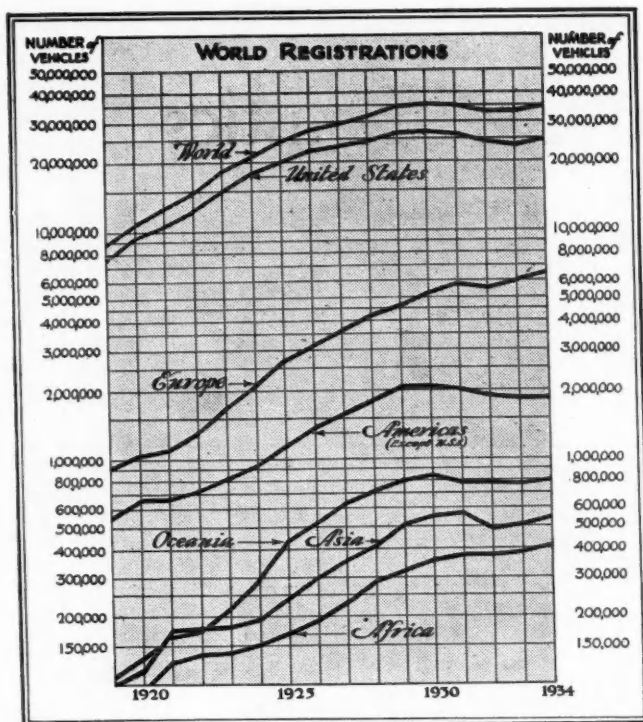
	Pro-prietors	Full-Time Employees	Payrolls
Dealers	33,823	190,691	\$204,818,000
Accessory, Tire & Battery Dealers	15,626	25,341	29,596,000
Filling Stations	156,451	143,391	151,938,000
Motorcycle & Bicycle Dealers	1,694	1,064	1,153,000
Garages	101,175	71,904	76,216,000
Other Automotive	317	598	825,000
Total	309,086	432,989	\$464,546,000

*1933 Census Figures. 1934 sales of these retailers are estimated by the Census Bureau to have been 22 per cent larger than in 1933. Retail automotive employment and payrolls, therefore, were undoubtedly materially larger in 1934 than in the previous year.

Nearly \$8,000,000,000 Spent for Highway Transportation in 1934

New Cars	\$1,300,000,000
New Trucks	300,000,000
Gasoline	1,800,000,000
Lubricating Oil	435,000,000
Replacement Parts	750,000,000
Service Labor	1,250,000,000
Replacement Tires and Tubes	950,000,000
Taxes	1,160,000,000
Total	\$7,945,000,000

This money was spent by the owners of the 24,751,644 motor vehicles registered in 1934.



For detail data see page 295.

World & U. S. R

Foreign Use of Motor Cars Pa

	Motor Vehicles	* Cars
Americas (Except U. S.).....	1,863,618	1,490,530
Africa	408,380	330,756
Asia	543,035	337,914
Europe	6,559,751	4,748,678
Oceania	800,693	617,954

World Total (Less U. S.)..	10,175,477	7,525,832
United States†.....	24,751,644	21,446,191
World Total, 1934	34,927,121	28,972,023
World Total, 1933	33,399,452	27,493,378

* Incomplete for all territories.

† Automotive Industries—All others The American

U. S. Registrations Make F

(As of December

State	Passenger Cars		Trucks		Buses		Total Registered Motor Vehicles		Per Cent Increase
	1934	1933	1934	1933	1934	1933	1934	1933	
Alabama *	190,344	175,483	34,094	30,234	α 838	α 618	225,276	206,335	9.2
Arizona	79,515	74,729	16,791	14,569	α 280	α 198	96,586	89,496	8.0
Arkansas	169,000	154,956	36,000	32,980	†	†	205,000	187,936	9.1
California	1,906,000	1,772,273	115,924	220,077	†	†	2,021,924	1,992,350	1.4
Colorado	238,318	239,058	26,103	27,433	†	†	264,421	266,491	-0.8
Connecticut	304,032	260,532	49,851	52,547	858	.....	354,741	313,079	13.3
Delaware	44,751	42,614	9,394	8,485	*	*	54,145	51,099	6.0
Dist. of Columbia	162,551	146,679	17,349	17,000	742	876	180,642	164,555	9.5
Florida	277,991	232,861	55,359	45,377	.....	1,027	333,350	279,265	19.5
Georgia	316,731	275,823	60,262	49,276	†	†	376,993	325,099	16.0
Idaho	83,000	81,282	14,500	13,739	†	†	97,500	95,021	2.8
Illinois	1,285,434	1,276,864	178,496	186,186	*	*	1,463,930	1,463,050	None
Indiana	675,000	652,802	114,900	113,794	1,000	910	790,900	767,506	3.1
Iowa	589,670	561,395	74,272	68,466	†	.....	663,942	629,861	5.5
Kansas	450,000	445,583	75,500	72,404	*	.....	525,500	517,987	1.4
Kentucky	282,921	262,030	36,260	32,111	464	406	319,645	294,547	8.3
Louisiana	199,160	191,993	44,479	44,393	†	†	243,639	236,386	3.3
Maine	144,000	132,902	34,000	35,271	116	†	178,116	168,173	6.0
Maryland	286,681	277,887	44,575	28,721	903	600	332,159	307,208	8.2
Massachusetts	682,750	686,249	98,508	99,854	4,134	3,685	785,392	789,788	-0.6
Michigan	1,025,548	955,570	123,405	121,639	*	*	1,148,953	1,077,209	6.8
Minnesota	593,506	579,908	103,499	99,130	206	205	697,211	679,243	2.6
Mississippi	133,000	131,764	33,500	32,924	.....	.....	166,500	164,683	1.2
Missouri	631,783	594,567	108,030	103,795	.....	*	739,813	698,362	6.0
Montana	98,826	82,765	31,388	27,480	*	*	130,214	110,245	18.1
Nebraska	340,000	336,437	56,000	53,947	200	267	396,200	390,651	1.5
Nevada	25,200	22,300	6,200	6,024	*	.....	31,400	28,324	11.0
New Hampshire	91,200	87,492	21,972	19,245	.....	261	113,172	106,998	5.8
New Jersey	735,731	697,707	123,939	120,416	4,900	8,471	864,570	826,594	4.5
New Mexico	66,445	61,065	16,099	15,290	303	293	82,847	76,648	8.1
New York	1,954,343	1,908,701	307,102	299,956	α 34,201	α 36,962	2,295,646	2,245,619	2.2
North Carolina	332,648	332,648	49,660	49,660	†	†	382,308	382,308	None
North Dakota	129,824	128,547	31,314	25,342	63	*	161,201	153,889	5.0
Ohio	1,445,000	1,396,125	158,000	158,189	*	*	1,603,000	1,554,314	3.2
Oklahoma	390,000	385,755	67,000	65,957	†	†	457,000	451,712	1.2
Oregon *	251,200	207,453	25,800	36,185	800	713	277,800	244,351	13.8
Pennsylvania	1,456,008	1,409,708	222,178	219,497	5,551	5,814	1,683,737	1,635,019	3.0
Rhode Island	123,960	117,793	18,935	17,965	514	503	143,409	136,261	5.1
South Carolina *	146,000	144,794	19,000	17,795	150	146	165,150	162,735	1.8
South Dakota	145,000	146,408	23,150	22,764	75	77	168,225	169,249	-0.5
Tennessee	303,000	278,333	37,500	33,848	α 1,800	.....	342,300	312,181	9.5
Texas	1,038,840	1,013,086	213,457	186,600	715	2,076	1,253,012	1,201,762	4.4
Utah	85,000	84,014	17,000	16,348	.....	.....	102,000	100,362	2.0
Vermont	69,223	65,531	8,612	7,924	86	121	77,921	73,576	6.0
Virginia	310,174	288,048	55,707	56,656	457	.....	366,338	344,704	6.2
Washington *	357,349	362,370	64,323	62,548	568	617	422,240	425,535	-0.7
West Virginia *	166,527	193,454	26,682	33,415	451	971	193,660	227,840	-14.8
Wisconsin	580,977	555,546	125,324	112,101	480	422	706,781	668,069	5.8
Wyoming	52,030	45,609	13,205	10,643	†	.....	65,235	56,252	16.0
Total	21,446,191	20,557,493	3,244,598	3,226,200	60,855	66,239	24,751,644	23,849,932	3.7

† Included with passenger cars.

* Included with trucks.

α Includes taxicabs.

* Includes motorcycles, cars and trucks for state and local use.

* Included with registered motor vehicles, as full fees are paid.

* Included with registered motor vehicles, as nominal fees are paid.

* For fiscal year July 1 to Dec. 31.

* Data cover only 10 months due to change in fiscal year.

* Fiscal year from Oct. 1 to Sept. 30.

Registrations

Passes Ten Million Mark

* Trucks	* Buses	* Motor-cycles	
342,040	22,598	14,367	....Americas (Except U. S.)
73,205	4,419	56,467	.....Africa
153,595	42,245	28,653	.....Asia
1,665,858	144,396	1,884,999	.....Europe
181,035	1,104	596	.....Oceania
2,415,733	214,762	1,985,082	World Total (Less U. S.)
3,244,598	60,855	95,643	.....United States†
5,660,331	275,617	2,080,725	.....World Total, 1934
5,369,729	236,724	.....	.....World Total, 1933

Automobile (Overseas Edition).

First Gain Since 1930

31, 1934, and 1933)

Tax-Exempt Motor Vehicles ¹		Total of All Motor Vehicles		Per Cent of Total		Persons Per Motor Vehicle		Motorcycles		Trailers		State
1934	1933	1934	1933	1934	1933	1934	1933	1934	1933	1934	1933	
831	991	226,107	207,326	.91	12.02	620	551	4,671	4,007	Alabama		
1,800	1,564	98,386	91,060	.40	4.74	344	293	2,313	1,989	Arizona		
.....	450	205,000	188,386	.82	9.15	380	356	7,000	6,887	Arkansas		
35,633	35,489	2,057,557	2,027,839	8.28	3.05	9,149	8,134	76,896	73,999	California		
.....	.....	264,421	266,491	1.06	3.90	766	788	861	832	Colorado		
.....	3,150	354,741	316,229	1.43	4.67	2,360	1,985	2,513	1,816	Connecticut		
.....	584	54,145	51,683	.22	4.47	334	318	1,356	912	Delaware		
2,654	2,903	183,296	167,458	.74	2.76	707	808	1,170	1,112	Dist. of Columbia		
3,902	3,459	337,252	282,724	1.36	4.73	1,002	740	9,886	9,567	Florida		
.....	4,692	376,993	329,791	1.52	7.74	990	956	9,293	5,836	Georgia		
1,230	1,219	98,730	96,240	.40	4.59	300	286	10,000	10,012	Idaho		
.....	.....	1,463,930	1,463,050	5.89	5.38	4,766	4,959	10,792	9,228	Illinois		
.....	.....	790,900	767,506	3.18	4.18	2,700	2,561	28,000	27,996	Indiana		
4,650	4,437	668,592	634,298	2.69	3.74	1,836	1,671	3,269	2,416	Iowa		
.....	4,000	525,500	521,987	2.11	3.63	710	709	3,700	3,847	Kansas		
3,887	2,981	323,532	297,528	1.30	8.30	862	822	.....	.....	Kentucky		
4,798	3,764	248,437	240,150	1.00	8.90	792	712	6,782	7,098	Louisiana		
.....	2,052	178,116	170,225	.72	4.50	1,024	1,001	6,886	5,893	Maine		
.....	1,400	332,159	308,608	1.34	5.03	1,537	1,485	1,434	1,383	Maryland		
.....	3,300	785,392	793,088	3.16	5.51	1,375	948	752	525	Massachusetts		
.....	.....	1,148,953	1,077,209	4.62	4.43	3,063	2,914	92,309	78,998	Michigan		
.....	3,187	697,211	682,430	2.80	3.73	1,731	1,687	24,584	19,648	Minnesota		
2,000	2,000	168,500	166,688	.68	12.35	200	199	900	850	Mississippi		
2,071	2,273	741,884	700,635	2.98	4.97	1,638	1,492	18,024	13,110	Missouri		
.....	1,300	130,214	111,545	.52	4.13	325	272	527	483	Montana		
.....	1,488	396,200	392,139	1.59	3.52	575	988	17,500	14,727	Nebraska		
.....	551	31,400	28,875	.13	4.97	98	92	815	631	Nevada		
.....	63	113,172	107,061	.46	4.15	1,200	1,102	2,512	1,923	New Hampshire		
.....	9,688	864,570	836,282	3.48	4.90	5,262	5,268	3,732	3,162	New Jersey		
.....	839	82,847	77,487	.33	5.29	264	363	918	983	New Mexico		
.....	23,367	2,295,646	2,268,986	9.23	5.70	12,170	11,684	18,299	13,646	New York		
.....	5,878	382,308	391,186	1.54	8.64	1,151	1,151	13,012	13,012	North Carolina		
.....	462	161,663	154,342	.65	4.26	249	204	263	143	North Dakota		
15,968	13,970	1,618,968	1,568,284	6.51	4.26	6,500	5,940	70,000	61,156	Ohio		
2,000	2,000	459,000	453,712	1.85	5.41	750	700	5,000	4,184	Oklahoma		
3,539	3,175	281,339	247,526	1.13	3.57	1,500	1,133	.....	.....	Oregon		
.....	15,589	1,683,737	1,650,608	6.77	5.84	11,719	11,384	13,257	10,139	Pennsylvania		
.....	1,213	143,409	137,474	.58	4.93	867	882	173	92	Rhode Island		
2,900	2,878	168,050	165,613	.67	10.60	500	444	1,950	1,858	South Carolina		
.....	932	168,225	170,181	.68	4.19	360	287	10,000	9,693	South Dakota		
.....	3,297	342,300	315,478	1.38	7.80	1,175	1,064	3,000	2,982	Tennessee		
10,988	8,530	1,264,000	1,210,292	5.07	4.86	3,213	3,355	34,123	36,043	Texas		
.....	900	102,000	101,262	.41	5.10	450	447	500	457	Utah		
.....	400	77,921	73,976	.31	4.64	600	553	964	683	Vermont		
4,705	4,356	371,043	349,060	1.49	6.67	1,747	1,756	2,380	1,845	Virginia		
7,062	7,303	429,302	432,838	1.73	3.81	1,569	1,629	5,470	4,849	Washington		
.....	3,064	193,660	230,904	.78	9.25	865	1,181	1,084	2,105	West Virginia		
.....	5,891	706,781	673,960	2.84	4.25	2,767	2,261	8,551	2,841	Wisconsin		
536	473	65,771	56,725	.26	3.56	181	121	5,423	20	Wyoming		
111,616	204,493	24,863,260	24,054,425	100.00	5.10	95,643	90,636	542,904	475,617	Total		

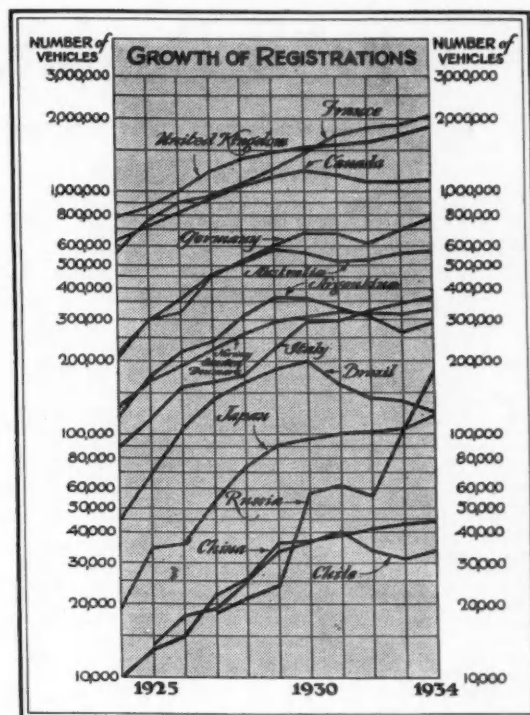
¹ Fiscal year ending Nov. 30.

² Six-month period only in 1934 due to change in fiscal year.

— Decrease.

NOTE—In the above tabulations Automotive Industries has endeavored to obtain the actual number of motor vehicles that

had been in use during 1934. Duplications have been eliminated wherever possible. Tax-exempt or official cars or trucks have been segregated for 1933, but for 1934 are in many cases included with registered motor vehicles.



1934 Registrations by Countries

By special arrangement with El Automovil Americano and The American Automobile (Overseas Edition)

AMERICA

COUNTRY	Auto-mobiles	Cars	Trucks	Buses	Motor-cycles
Alaska	2,919	2,073	846	.....	6
Antigua	310	260	35	15	.....
Argentina	291,924	228,631	63,293	.....	.....
Bahamas	985	750	200	35	.....
Barbados	1,750	1,425	325	.....	.....
Bermuda	45	13	32	.....	.....
Bolivia	5,350	1,800	3,500	50	.....
Brazil	140,000	95,000	45,000	.....	.....
British Honduras	172	109	63	.....	.....
Canada	1,116,888	953,503	163,385	.....	10,224
Chile	33,350	22,875	9,400	1,075	750
Colombia	14,850	9,500	4,000	1,350	.....
Costa Rica	2,634	1,450	448	136	.....
Cuba	30,714	18,526	2,050	10,138	350
Dominica	80	60	20	.....	.....
Dominican Rep.	2,456	1,715	741	.....	157
Ecuador	2,450	1,500	950	.....	.....
Grenada	400	.....	.....	.....	.....
Guadeloupe	1,300	.....	.....	.....	.....
Guatemala	3,200	2,400	800	.....	.....
Guiana	1,600	.....	.....	.....	.....
Haiti	2,486	1,912	199	375	30
Honduras	1,403	950	450	3	30
Jamaica	8,725	6,800	1,800	125	550
Martinique	2,300	1,800	500	.....	.....
Mexico	90,000	61,000	22,000	7,000	1,200
Montserrat	50	.....	.....	.....	.....
Netherlands West Indies	2,373	1,470	638	265	148
Newfoundland	3,278	2,675	595	8	112
Nicaragua	756	566	170	20	70
Other West Indies	700	.....	.....	.....	.....
Panama	9,386	8,250	620	516	49
Paraguay	2,000	.....	.....	.....	.....
Peru	14,180	8,860	4,770	550	220
Puerto Rico	14,863	11,712	2,770	381	178
Salvador	2,300	.....	.....	.....	.....
St. Lucia	170	130	40	.....	.....
St. Pierre and Miquelon	100	.....	.....	.....	.....
St. Vincent	173	135	38	.....	.....
Trinidad & Tobago	7,000	5,000	2,000	.....	.....
United States	24,751,644	21,446,191	3,244,598	60,855	95,643
Uruguay	33,304	26,551	6,753	.....	.....
Venezuela	14,758	10,740	3,468	550	292
Virgin Islands	536	389	141	6	.....
Total, 1934	26,615,262	22,936,720	3,586,638	83,453	110,010
Total, 1934, less U. S.	1,863,618	*1,490,530	*342,040	*22,598	*14,367
Total, 1933, (revised)	25,677,686	21,991,837	3,568,733	82,684	*106,946
Total, 1933, less U. S. (revised) ..	1,827,754	*1,434,544	*342,533	*16,445	.....

*Not complete for all territories.

AFRICA

COUNTRY	Auto-mobiles	Cars	Trucks	Buses	Motor-cycles
Algeria	56,950	49,000	6,000	1,950	4,000
Angola	3,593	1,510	2,082	.....	168
Belgian Congo	4,828	2,508	2,320	.....	1,564
British East Africa	16,831	11,218	5,613	.....	3,155
British West Africa	10,687	4,115	6,572	.....	1,865
Canary Islands	3,860	2,188	1,166	506	114
Egypt	28,639	23,919	3,408	1,312	3,344
Ethiopia	697	531	160	6	60
French Equatorial Africa	1,731	669	1,062	.....	247
French West Africa	5,380	2,500	2,750	130	.....
Liberia	90	50	40	.....	9
Madagascar	3,850	3,250	600	.....	.....
Madeira	780	440	160	180	.....
Mauritius	2,233	1,778	330	125	194
Morocco	36,416	27,045	9,371	.....	3,140
Nyasaland	1,200	755	445	.....	730
Port. East Africa	3,617	2,194	1,423	.....	622
Rhodesia	15,350	12,800	2,550	.....	2,760
Seychelles	87	82	5	.....	84
Somalilands & Eritrea	868	550	318	.....	.....
South West Africa	2,400	1,600	800	.....	100
Sudan	2,425	1,125	1,300	.....	290
Togo and Cameroon	1,540	551	989	.....	186
Tripolitania	1,025	475	550	.....	170
Tunisia	13,250	11,300	1,740	210	.....
Union of South Africa	190,053	168,603	21,450	.....	33,665
Total, 1934	408,380	*330,756	*73,205	*4,419	*56,467
Total, 1933 (revised) ..	383,227	*303,192	*68,032	*3,988	*55,704

*Incomplete for all territories.

ASIA

COUNTRY	Auto-mobiles	Cars	Trucks	Buses	Motor-cycles
Afghanistan	370	150	220	.....	.....
Arabia	1,360	.....	.....	.....	.....
British Malaya	26,654	21,519	5,135	.....	3,503
Brunei	100	70	30	.....	.....
Ceylon	21,100	16,000	2,100	3,000	3,200
China	41,500	29,000	9,000	3,500	.....
Chosen	6,863	2,017	2,410	2,436	6,863
Cyprus	1,748	.....	.....	.....	325
French Indo China	15,070	11,868	1,800	1,402	1,512
Hong Kong	3,250	2,400	650	200	400
India	158,040	106,385	51,655	.....	.....
Iraq	5,000	3,901	1,099	.....	89
Japanese Empire	120,472	54,938	39,842	25,692	.....
Manchukuo	6,173	.....	.....	.....	1,000
Netherlands East Indies	53,595	39,280	9,250	5,065	10,010
Palestine	5,350	3,000	1,400	950	.....
Persia	6,000	2,000	4,000	.....	450
Philippine Islands	42,354	26,489	15,865	.....	534
Siam	8,250	4,450	3,800	.....	.....
Syria	11,986	9,247	2,739	.....	767
Turkey	7,800	5,200	2,600	.....	.....
Total, 1934	543,035	*337,914	*153,595	*42,245	*28,657
Total, 1933 (revised) ..	506,925	*267,124	*110,505	*15,027	*37,417

*Incomplete for all territories.

EUROPE

COUNTRY	Automobiles	Cars	Trucks	Buses	Motor-cycles
Albania	900	300	450	150	20
Austria	39,171	21,811	15,184	2,176	.....
Azores	819	.....	.....	.....	114
Belgium	155,000	97,500	57,500	.....	.....
Bulgaria	2,081	1,102	617	362	386
Czechoslovakia	111,918	79,137	28,933	3,848	47,000
Danzig Free City	2,775	1,920	800	55	2,280
Denmark	125,553	88,289	35,987	1,277	25,272
Estonia	3,283	1,820	1,286	177	973
Faroe Islands	100	52	48	.....	.....
Finland	30,600	18,700	10,500	1,400	4,650
France	2,036,653	*1,586,653	**450,000	.....	.....
Germany	776,194	595,844	168,712	11,638	933,763
Gibraltar	850	700	150	.....	.....
Great Britain	1,880,889	*1,363,704	427,920	†89,265	.....
Greece	15,700	9,000	5,000	1,700	500
Holland	144,250	92,130	48,460	3,660	32,000
Hungary	14,950	10,780	3,600	570	9,500
Iceland	1,550	600	950	.....	.....
Irish Free State	48,375	39,304	8,254	817	4,334
Italy	370,896	265,847	95,500	9,549	131,462
Latvia	3,819	2,010	1,569	240	1,875
Lithuania	1,770	1,200	300	270	1,170
Luxembourg	5,080	2,944	2,068	63	.....
Malta	3,276	2,325	386	5,652	376
Monaco	1,607	1,327	180	100	250
Northern Ireland	33,130	25,320	7,100	710	4,400
Norway	58,535	34,595	21,440	2,500	7,400
Poland	25,712	19,917	3,132	2,663	8,546
Portugal	33,200	24,500	6,900	1,800	3,000
Rumania	33,450	23,950	6,500	3,000	.....
Saar	10,100	6,336	3,648	116	.....
Spain	167,700	122,500	45,200	.....	13,000
Sweden	141,000	98,200	39,200	3,600	45,000
Switzerland	87,920	67,500	19,000	1,420	29,500
U.S.S.R. (Russia)	180,000	33,500	146,500	.....	.....
Yugoslavia	10,945	7,361	2,884	700	3,228
Total, 1934	6,559,751	*4,748,678	*1,665,858	*144,396	*1,884,999
Total, 1933 (revised) ..	6,052,758	*4,328,933	*1,446,998	*134,526	*1,761,041

†Classified as hackneys.

‡Includes exempt vehicles.

*Incomplete for all territories.

**Estimated.

OCEANIA

COUNTRY	Auto-mobiles	Cars	Trucks	Buses	Motor-cycles
Australia	575,000	441,000	134,000	.....	.....
Fiji Islands	1,255	763	216	276	130
French Oceania	588	416	172	.....	30
Hawaii	48,323	39,146	8,871	306	436
New Zealand	174,627	136,469	37,636	522	.....
Other Oceania	600	.....	.....	.....	.....
Samoa	300	160	140	.....	.....
Total, 1934	800,693	*617,954	*181,035	*1,104	*596
Total, 1933 (revised) ..	778,856	*602,292	*175,461	*499	*98,740

*Incomplete for all territories.

U. S. Motor Vehicle Registrations, By Years

	Passenger Cars	Trucks	Total Motor Vehicles		Passenger Cars	Trucks	Total Motor Vehicles
1895	4	.....	4	1915	2,309,666	136,000	2,445,666
1896	16	.....	16	1916	3,297,996	215,000	3,512,996
1897	90	.....	90	1917	4,657,340	326,000	4,983,340
1898	800	.....	800	1918	5,621,617	525,000	6,146,617
1899	3,200	.....	3,200	1919	6,771,074	794,372	7,565,446
1900	8,000	.....	8,000	1920	8,225,859	1,006,082	9,231,941
1901	14,800	.....	14,800	1921	9,346,195	1,118,520	10,464,715
1902	23,000	.....	23,000	1922	10,864,128	1,375,725	12,239,853
1903	32,920	.....	32,920	1923	13,479,608	1,612,569	15,092,177
1904	54,590	410	55,000	1924	15,460,649	2,134,724	17,595,373
1905	77,400	600	78,000	1925	17,496,420	2,440,854	19,937,274
1906	105,900	1,100	107,000	1926	19,237,171	2,764,222	22,001,393
1907	140,300	1,700	142,000	1927	20,219,224	2,914,019	23,133,243
1908	194,400	3,100	197,500	1928	21,379,125	3,113,999	24,493,124
1909	305,950	6,050	312,000	1929	23,121,589	3,379,854	26,501,443
1910	458,500	10,000	468,500	1930*	23,183,241	3,473,831	26,657,072
1911	619,500	20,000	639,500	1931*	22,567,381	3,426,515	25,993,896
1912	902,600	41,400	944,000	1932*	21,139,092	3,202,730	24,341,822
1913	1,194,262	63,800	1,258,062	1933*	20,557,493	3,226,200	23,849,932
1914	1,625,739	85,600	1,711,339	1934*	21,446,191	3,305,453	24,751,644

*Automotive Industries count, all others Department of Commerce.

Gas Taxes Reach New High in 1934

State	State Tax per Gallon, Cents	State Gasoline Tax Receipts* 1934	1933	Per Cent Change	State Registration Fees† 1934	1933	Per Cent Change	Total Tax Receipts from Gasoline and Registrations 1934	1933	State Taxes per Motor Vehicle 1934	1933
Alabama	6	\$8,859,518	\$8,033,141	+10.2	\$2,383,202	\$2,724,257	-12.5	\$11,242,720	\$10,757,398	\$50.00	\$52.20
Arizona	5	3,028,265	2,679,032	+13.2	709,399	647,816	+9.4	3,737,664	3,326,848	38.70	37.40
Arkansas	6½	7,940,000	5,989,429	+32.7	2,250,000	1,768,850	+27.0	10,190,000	7,758,279	49.30	41.30
California	3½	36,432,612	35,217,162	+3.4	9,526,250	9,866,449	-3.3	45,958,862	45,083,611	22.25	22.60
Colorado	4	6,445,028	5,324,996	+21.0	1,950,000	1,746,823	+11.8	8,395,028	7,071,819	31.75	26.60
Connecticut	2	4,950,000	4,811,630	+3.0	7,947,603	7,850,589	+1.2	12,897,603	12,662,219	36.20	40.45
Delaware	3	1,184,956	1,127,330	+5.2	883,439	1,014,333	-13.0	2,068,395	2,141,663	38.05	41.90
Dist. of Columbia	2	2,040,000	2,082,346	-2.0	750,000	625,508	+20.0	2,790,000	2,707,854	15.50	16.45
Florida	7	16,255,182	14,249,308	+14.0	4,244,541	4,994,882	-15.2	20,499,723	19,244,190	61.50	68.80
Georgia	6	14,304,590	12,634,513	+13.1	1,192,854	1,036,241	+15.1	15,497,444	13,670,754	41.10	42.05
Idaho	5	3,220,000	2,282,370	+41.2	1,550,000	1,401,849	+10.8	4,770,000	3,684,219	49.00	38.80
Illinois	3	29,211,263	27,833,011	+5.0	17,333,334	16,229,327	+7.0	46,544,597	44,062,338	31.75	30.15
Indiana	4	17,322,322	16,283,202	+6.3	8,000,000	7,846,883	+2.1	25,322,322	24,130,085	32.00	31.40
Iowa	3	11,073,051	9,372,343	+17.3	10,033,946	10,695,407	-6.5	21,107,027	20,067,750	31.80	31.90
Kansas	3	8,225,000	7,731,819	+6.3	3,235,000	3,056,837	+6.0	11,460,000	10,788,656	21.70	20.90
Kentucky	5	8,981,000	8,314,659	+8.0	3,207,552	4,174,076	-23.4	12,188,552	12,488,735	37.95	42.40
Louisiana	5	8,909,880	8,155,436	+9.2	4,390,356	4,052,816	+8.3	13,300,236	12,208,252	54.75	51.75
Maine	4	4,488,811	4,080,371	+10.0	3,150,000	2,909,237	+8.8	7,638,811	6,989,608	42.90	41.50
Maryland	4	8,291,124	7,207,749	+15.1	3,438,701	3,581,251	-4.0	11,729,825	10,789,000	35.25	34.90
Massachusetts	3	17,724,260	16,377,352	+8.2	6,202,907	6,035,102	+2.9	23,927,167	22,412,454	30.45	28.45
Michigan	3	20,823,035	19,458,458	+7.0	14,297,764	18,560,314	-23.0	35,120,799	38,018,772	30.90	35.50
Minnesota	3	10,845,377	10,014,857	+8.4	6,580,885	6,366,982	+3.3	17,426,262	16,381,839	24.95	24.05
Mississippi	6	5,720,000	5,801,725	-1.5	2,250,000	1,870,396	+20.2	7,970,000	7,672,121	48.00	45.60
Missouri	2	9,798,972	9,081,135	+8.0	7,343,300	9,356,828	-21.5	17,142,272	18,437,963	23.15	25.40
Montana	5	3,598,004	2,751,303	+31.0	1,100,000	1,070,104	+2.9	4,698,004	3,821,407	36.00	34.70
Nebraska	4	8,192,881	7,706,261	+6.3	1,904,400	1,721,834	+10.8	10,097,281	9,428,095	27.10	24.15
Nevada	4	894,202	695,653	+28.5	325,000	299,634	+8.5	1,219,202	995,287	38.70	35.15
New Hampshire	4	2,600,000	2,349,849	+10.8	2,000,000	2,167,421	-7.6	4,600,000	4,517,270	40.60	42.60
New Jersey	3	17,000,000	16,397,386	+3.9	15,252,799	15,377,843	-0.6	32,252,799	31,775,229	27.40	38.35
New Mexico	5	2,537,853	2,265,510	+12.1	842,901	666,748	+26.5	3,380,754	2,932,258	40.80	38.20
New York	3	43,750,000	43,344,695	+1.0	41,663,831	42,318,407	-1.7	85,413,831	85,663,102	37.45	38.10
North Carolina	6	17,020,000	14,769,602	+15.2	5,750,000	5,356,126	+7.5	22,770,000	20,125,728	59.50	52.60
North Dakota	3	2,218,101	1,923,951	+14.5	1,290,686	1,382,008	-6.5	3,508,787	3,305,959	21.70	21.55
Ohio	4	27,306,411	33,939,981	-19.5	19,962,328	17,677,551	+13.0	47,268,739	51,617,532	29.50	33.20
Oklahoma	4	10,700,000	10,064,685	+7.0	3,600,000	3,382,455	+6.5	14,300,000	13,447,140	31.30	29.70
Oregon	5	7,200,000	6,343,891	+13.8	2,204,925	5,337,137	-58.7	9,404,925	11,681,028	33.90	47.80
Pennsylvania	3	32,000,000	30,739,117	+4.3	30,842,097	29,184,792	+5.9	62,842,097	59,923,909	37.35	36.60
Rhode Island	2	2,058,737	1,880,972	+9.7	2,312,504	2,198,342	+5.2	4,371,241	4,079,314	30.60	29.90
South Carolina	6	7,820,000	6,679,326	+17.0	2,800,000	2,503,367	+12.0	10,620,000	9,182,693	64.25	56.60
South Dakota	4	3,764,871	3,346,015	+12.4	1,317,500	1,459,027	-9.8	5,082,371	4,805,042	30.20	28.40
Tennessee	7	14,000,000	12,979,882	+8.0	3,333,500	2,940,010	+13.3	17,333,500	15,919,892	50.60	50.95
Texas	4	31,784,466	28,479,350	+11.7	14,625,739	12,747,489	+14.8	46,410,205	41,226,839	37.10	34.30
Utah	4	2,480,000	2,188,998	+13.3	950,000	797,598	+19.1	3,430,000	2,986,596	33.95	29.80
Vermont	4	1,933,492	1,766,152	+9.4	2,157,314	2,072,717	+4.0	4,090,806	3,838,869	52.50	52.10
Virginia	5	12,496,831	11,082,040	+13.1	4,850,403	6,090,279	-20.3	17,347,234	17,172,319	47.30	49.60
Washington	5	11,870,355	10,863,214	+9.2	3,183,850	2,482,758	+28.2	15,054,205	13,345,972	35.55	31.30
West Virginia¹	4	2,205,004	4,919,664	(2)	2,029,666	3,837,922	(2)	4,234,670	8,757,586	21.90	38.50
Wisconsin	4	15,343,396	15,169,426	+1.1	10,050,779	9,768,006	+2.3	25,394,175	24,937,432	35.80	37.30
Wyoming	4	1,739,540	1,405,415	+24.2	437,047	679,411	-35.5	2,176,587	2,084,826	33.35	37.00
Totals		\$548,588,420	\$518,195,712	+5.9	\$297,638,302	\$301,932,039	-1.4	\$846,226,722	\$820,127,751	34.20	34.40

* Amount is net after deduction of refunds.

† Includes all license and miscellaneous fees.

‡ Data covers only 10 months due to change in fiscal year.

¹ For six-month period, Jan. 1 to June 30, 1934, due to change in fiscal year.

(2) Not comparable.

Including federal taxes on gasoline, the average total of gasoline and license levies per motor vehicle registered in 1934, was \$40.25.

World Production of Motor Vehicles

	1932*			1933*			1934**		
	Passenger Cars	Trucks & Buses	Total	Passenger Cars	Trucks & Buses	Total	Passenger Cars	Trucks & Buses	Total
United States	1,135,491	235,187	1,370,678	1,573,512	346,545	1,920,057	2,190,099	588,640	2,778,739
Canada	50,718	10,098	60,816	53,855	12,069	65,924	92,538	24,352	116,890
Total	1,186,209	245,285	1,431,494	1,627,367	358,614	1,985,981	2,282,637	612,992	2,895,629
Austria	1,375	989	2,364	1,150	425	1,575	*1,100	*400	*1,500
Belgium	1,700	525	2,225	800	600	1,400	750	*500	*1,250
Czechoslovakia	10,635	2,945	13,580	8,670	1,330	10,000	8,000	2,000	10,000
Denmark		148	148		140	140			†
France	137,710	33,245	170,955	163,770	28,159	191,929	*151,344	*25,000	176,344
Germany	42,193	8,224	50,417	92,610	13,222	105,832	*125,000	*20,000	145,000
Hungary		121	121		143	143			†
Italy	25,600	3,500	29,100	32,000	10,000	42,000	*33,000	*10,000	43,000
Japan		675	675	191	1,617	1,808	900	1,800	2,700
Poland	75	100	175	780	(1)	780			†
Soviet Russia	4,185	22,664	26,849	10,252	39,491	49,743	16,000	56,000	72,000
Spain	75	360	435	80	295	375			400
Sweden	890	2,105	2,995	700	2,275	2,975			2,830
Switzerland	27	969	996		480	480		400	400
United Kingdom	186,116	58,318	244,434	216,149	64,377	280,526	†261,914	†80,316	†346,230
Total	410,581	134,888	545,469	527,152	162,554	689,706	††598,008	††200,416	803,654
World Total	1,596,790	380,173	1,976,963	2,154,519	521,168	2,675,687	2,880,645	813,408	3,699,283

(1) Included with passenger cars.

*Bureau of Foreign and Domestic Commerce—Automotive Division.

**The American Automobile (Overseas Edition).

†Fiscal year ending Sept. 30, 1933.

††Estimated 1000 production for these three countries combined.

††Not complete for all countries.

European Production Totals

	Motor Vehicles
1924	334,500
1925	460,678
1926	529,343
1927	578,201
1928	589,900
1929	650,000
1930	583,107
1931	576,289
1932	545,469
1933	689,666
1934*	†803,654

These figures do not include American cars assembled in European plants.

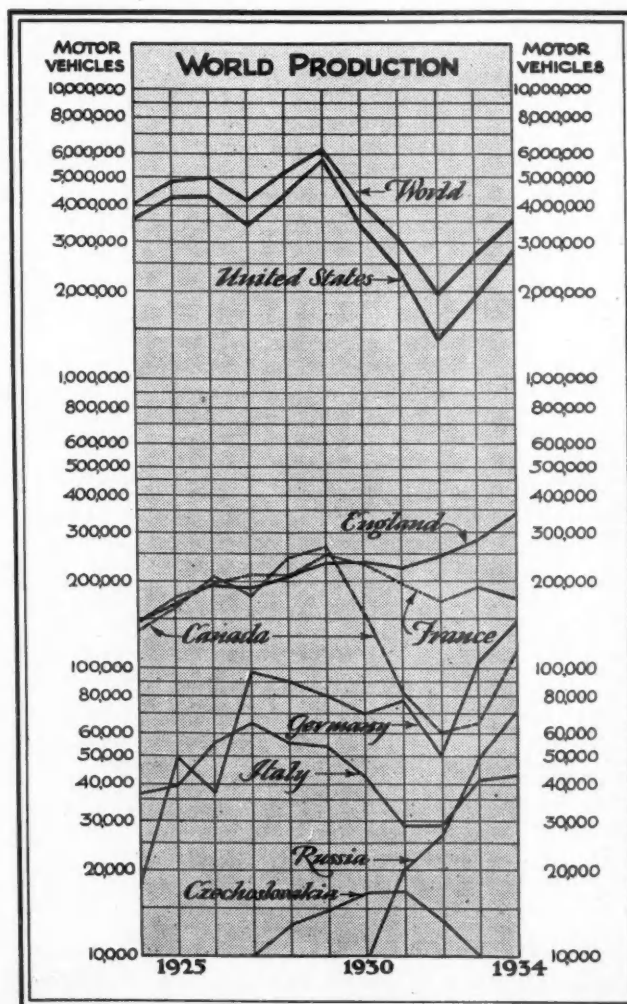
*The American Automobile (Overseas Edition).

† Partly estimated.

Canadian Production*

	Pass. Cars	Trucks	Total
1922	94,904	7,149	102,053
1923	129,228	17,210	146,438
1924	117,765	17,481	135,246
1925	135,573	26,397	161,970
1926	164,856	39,871	204,727
1927	146,827	32,227	179,054
1928	196,741	45,641	242,382
1929	207,498	55,797	263,295
1930	125,442	28,750	154,192
1931	65,093	17,528	82,621
1932	50,718	10,098	60,816
1933	53,855	12,069	65,924
1934	92,538	24,352	116,890

* Dominion Bureau of Statistics.



U. S. Output Up Over 40% in Units and Value

(Yearly totals of U. S. and Canadian production and its wholesale value)

Year	Passenger Cars		Trucks		Cars and Trucks	
	Units*	Value	Units	Value	Units	Value
1912	356,000	\$335,000,000	22,000	\$43,000,000	378,000	\$378,000,000
1913	461,500	399,902,000	23,500	44,000,000	485,000	443,902,000
1914	543,679	413,859,000	25,375	45,098,464	569,054	458,957,843
1915	895,930	575,978,000	74,000	125,800,000	969,930	701,778,000
1916	1,525,578	921,378,000	92,130	161,000,000	1,617,708	1,082,378,000
1917	1,745,792	1,053,505,781	128,157	220,982,668	1,873,949	1,274,488,449
1918	943,436	801,937,925	227,250	434,168,992	1,170,686	1,236,106,917
1919	1,657,652	1,461,785,925	275,943	423,326,621	1,933,595	1,885,112,546
1920	1,905,560	1,809,170,963	321,789	423,249,410	2,227,349	2,232,420,373
1921	1,518,061	1,091,752,452	164,304	169,914,098	1,682,365	1,261,666,550
1922	2,369,089	1,561,740,645	277,140	231,282,063	2,646,229	1,793,022,708
1923	3,753,945	2,274,554,488	426,505	317,478,940	4,180,450	2,592,033,428
1924	3,303,646	2,040,706,519	434,140	326,706,496	3,737,786	2,367,413,015
1925	3,870,744	2,544,528,799	557,056	470,634,763	4,427,800	3,015,163,562
1926	3,948,843	2,746,064,722	556,818	468,752,769	4,505,661	3,214,817,491
1927	3,083,360	2,265,633,102	497,020	435,072,641	3,580,380	2,700,705,743
1928	4,012,158	2,703,753,500	588,983	459,045,380	4,601,141	3,162,798,880
1929	4,794,898	2,981,141,842	826,811	595,504,039	5,621,709	3,576,645,881
1930	2,910,187	1,720,652,104	599,991	405,949,915	3,510,178	2,126,602,019
1931	2,038,183	1,153,907,947	434,176	272,748,305	2,472,359	1,426,656,252
1932	1,186,209	650,781,297	245,285	142,264,003	1,431,494	793,045,300
1933	1,627,367	795,304,780	358,614	192,131,509	1,985,981	987,436,289
1934	2,282,637	1,137,000,000	612,992	320,000,000	2,895,629	1,457,000,000

* Includes Taxicabs.

\$501-\$1000 Price Group Shows Greatest Gain in Production

Passenger Car Production by Wholesale Price Classes

	(U. S. and Canada) 12 Months Compared			Per Cent of Total		
	1934	1933	1932	1934	1933	1932
Under \$500....	1,485,157	1,316,447	794,188	65.06	80.89	66.95
\$501-\$750	686,260	237,099	260,831	30.07	14.57	22.00
\$751-\$1,000 ...	66,223	32,610	74,610	2.90	2.00	6.29
\$1,001-\$1,500 ..	27,576	20,125	36,670	1.21	1.24	3.09
\$1,501-\$2,000 ..	8,391	10,409	8,699	.37	.64	.73
\$2,001-\$3,000 ..	6,879	8,725	8,679	.30	.54	.73
\$3,001 and over	2,151	1,952	2,532	.09	.12	.21
Total	2,282,637	1,627,367	1,186,209	100.00	100.00	100.00

Passenger Car Production by Body Types

United States and Canada

	1931		1932		1933		1934	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Roadster	111,119	5.45	36,104	3.04	11,952	0.73	14,380	0.63
Touring	33,151	1.62	11,349	0.96	10,418	0.65	12,555	0.55
Convertible Coupe...	66,232	3.25	33,293	2.81	21,185	1.30	28,533	1.25
Convertible Sedan...	19,082	0.94	8,810	0.74	1,638	0.10	4,565	0.20
Coupe	438,215	21.50	257,404	21.70	325,330	19.99	456,527	20.00
2-door Sedan	524,050	25.71	362,660	30.57	533,905	32.80	753,270	33.00
4-door Sedan	765,791	37.57	442,168	37.27	686,621	42.18	963,730	42.22
All other closed cars.	65,804	3.23	17,195	1.45	23,002	1.41	30,816	1.35
Chassis	14,739	0.73	17,262	1.46	13,717	0.84	18,261	0.80
Total	2,038,183	100.00	1,186,209	100.00	1,627,768	100.00	2,282,637	100.00

Monthly Motor Vehicle Production*

United States and Canada

Passenger Car Production

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan.	217,825	287,900	209,902	212,244	364,773	242,672	142,869	101,915	112,754	118,598	Jan.
Feb.	257,330	337,900	277,376	301,320	431,755	293,036	187,948	98,604	93,153	194,767	Feb.
Mar.	339,142	402,568	363,595	386,510	546,489	348,087	241,727	106,003	103,396	287,010	Mar.
April	397,915	403,271	377,713	384,778	571,956	393,804	300,960	126,597	156,712	304,482	April
May	388,819	396,218	378,921	404,444	541,310	382,619	282,096	165,025	188,675	290,269	May
June	369,955	359,534	296,035	381,026	469,260	298,130	215,979	166,646	213,602	272,662	June
July	364,109	330,007	246,530	357,682	439,598	230,761	187,324	101,478	196,587	232,275	July
Aug.	229,278	393,823	285,724	422,996	452,857	190,864	158,851	79,073	196,333	190,825	Aug.
Sept.	275,973	365,553	235,124	374,276	375,046	182,049	111,336	66,489	161,734	128,120	Sept.
Oct.	405,132	300,854	189,278	351,899	328,305	117,014	59,176	37,468	107,593	86,628	Oct.
Nov.	337,750	227,131	114,885	223,896	176,629	104,668	49,996	49,201	43,868	46,608	Nov.
Dec.	287,516	144,084	108,277	211,087	96,920	126,483	99,921	87,710	52,960	130,393	Dec.
Total	3,870,744	3,948,843	3,083,360	4,012,158	4,794,898	2,910,187	2,038,183	1,186,209	1,627,367	2,282,637	Total

Motor Truck Production

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan.	33,422	36,577	44,382	27,947	57,765	40,938	35,475	21,160	19,429	45,213	Jan.
Feb.	38,828	44,590	46,014	34,980	65,950	52,925	41,863	24,291	15,592	45,511	Feb.
Mar.	51,105	53,273	54,168	44,273	79,587	69,031	47,671	21,274	18,508	58,433	Mar.
April	54,936	57,567	53,280	49,537	91,855	74,477	53,138	28,539	27,975	68,626	April
May	50,376	53,883	52,435	55,281	94,940	62,080	47,805	27,491	35,132	61,544	May
June	43,989	48,486	46,990	44,169	98,164	51,466	41,496	23,572	43,448	49,308	June
July	46,878	44,811	33,853	59,630	78,703	44,960	35,386	15,137	39,310	45,415	July
Aug.	39,921	48,313	36,796	69,547	59,985	43,296	32,890	15,319	42,601	53,889	Aug.
Sept.	62,559	50,880	36,448	62,231	54,683	46,557	31,876	20,003	35,874	46,330	Sept.
Oct.	51,962	48,237	38,152	63,921	66,235	41,928	22,406	14,157	30,772	49,643	Oct.
Nov.	45,271	38,998	26,102	45,013	50,368	37,493	20,118	12,560	19,106	33,554	Nov.
Dec.	37,809	31,203	28,400	32,454	28,582	34,840	24,052	21,782	30,867	55,526	Dec.
Total	557,056	556,818	497,020	588,983	826,817	599,991	434,176	245,285	358,614	612,992	Total

Passenger Car and Truck Production

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan.	251,247	324,477	254,284	240,191	422,538	283,610	178,344	123,075	132,183	163,811	Jan.
Feb.	296,158	382,490	323,390	336,300	497,705	345,961	229,811	122,895	108,745	240,278	Feb.
Mar.	390,247	455,841	417,763	430,783	626,076	417,118	289,398	127,277	121,904	345,443	Mar.
April	452,851	460,838	430,993	434,315	663,811	468,281	354,098	155,136	184,687	373,108	April
May	439,195	450,101	431,356	459,725	636,250	444,699	329,901	192,516	223,807	351,813	May
June	413,944	408,020	343,025	425,195	567,424	349,596	257,475	190,218	257,050	321,970	June
July	410,987	374,818	280,383	417,312	518,301	275,721	222,710	116,615	235,897	277,690	July
Aug.	269,199	442,136	322,520	492,543	512,842	234,160	191,741	94,392	238,934	244,714	Aug.
Sept.	338,532	416,433	271,572	436,507	429,729	228,606	143,212	86,492	197,608	174,450	Sept.
Oct.	457,094	349,091	227,430	415,820	394,540	158,942	81,582	51,625	138,365	136,271	Oct.
Nov.	383,021	266,129	140,987	268,909	226,997	142,161	70,114	61,761	62,974	80,162	Nov.
Dec.	325,325	175,287	136,677	243,541	125,502	161,323	123,973	109,492	83,827	185,919	Dec.
Total	4,427,800	4,505,661	3,580,380	4,601,141	5,621,715	3,510,178	2,472,359	1,431,494	1,985,981	2,895,629	Total

* U. S. Census Bureau,¹ and Dominion Bureau of Statistics.

¹ Includes overseas assemblies of motor vehicles of American make.

Passenger Car Production by Leading Manufacturing Groups

	1929		1930		1931		1932		1933		1934	
	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total	Units	% of Total
Chrysler Motors.	401,400	8.3	246,097	8.4	253,200	12.4	211,600	17.8	409,980	25.2	463,375	20.3
Ford Motor Co...	1,707,251	35.6	1,197,371	41.1	566,986	27.8	342,345	28.9	375,956	23.1	602,616	26.4
Gen. Motors Corp.	1,550,380	32.4	997,280	34.3	895,210	44.0	440,900	37.1	671,580	41.3	890,228	39.0
All others	1,135,867	23.7	469,439	16.2	322,787	15.8	191,364	16.2	169,851	10.4	326,418	14.3
Total	4,794,898	100.0	2,910,187	100.0	2,038,183	100.0	1,186,209	100.0	1,627,367	100.0	2,282,637	100.0

Truck Production by Capacities—United States and Canada

Truck Tonnage	1929		1930		1931		1932		1933		1934	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
¾ ton or less.....	141,859	17.1	144,869	24.0	109,220	25.2	79,127	32.3	98,920	27.6	176,696	28.8
1 ton and less than 1½.....	78,786	9.5	31,028	5.2	4,899	1.1	1,618	.6	893	.2	2,236	.4
1½ ton and less than 2.....	523,691	63.4	370,541	61.7	289,418	66.6	144,113	58.8	228,238	63.7	389,268	63.5
2 ton and less than 2½.....	28,416	3.4	16,477	2.7	8,516	2.0	7,620	3.1	15,866	4.4	25,361	4.1
2½ ton and less than 3½.....	33,530	4.1	22,887	3.8	11,516	2.7	6,006	2.4	7,728	2.2	10,577	1.7
3½ tons and less than 5.....	8,643	1.0	6,412	1.0	4,532	1.0	2,689	1.1	2,859	.8	4,284	.7
5 ton	2,384	.03	1,094	.02	906	0.2	1,407	.6	580	.2	1,086	.2
Over 5 ton and special types..	9,508	1.2	6,683	1.4	5,169	1.2	2,705	1.1	3,530	.9	3,484	.6
Total	826,817	100.0	599,991	100.0	434,176	100.0	245,285	100.0	358,614	100.0	612,992	100.0

Gasoline Consumption Gains

State	1934	1933	Per Cent	
			Change	1934
Alabama	152,597,000	133,885,000	+14.0	.92
Arizona	72,981,000	64,506,000	+13.1	.44
Arkansas	139,328,000	121,195,000	+15.0	.84
California	1,321,955,000	1,323,482,000	— 0.1	7.97
Colorado	184,112,000	159,917,000	+15.1	1.11
Connecticut	255,434,000	248,126,000	+ 2.9	1.54
Delaware	41,467,000	40,210,000	+ 3.0	.25
Dist. of Col.	102,837,000	104,852,000	— 1.8	.62
Florida	233,872,000	205,568,000	+13.7	1.41
Georgia	237,189,000	210,575,000	+12.9	1.43
Idaho	66,347,000	52,314,000	+27.0	.40
Illinois	1,033,347,000	970,986,000	+ 6.7	6.23
Indiana	464,426,000	439,009,000	+ 5.8	2.80
Iowa	401,397,000	355,568,000	+13.0	2.42
Kansas	383,151,000	352,523,000	+ 8.8	2.31
Kentucky	184,112,000	166,292,000	+10.8	1.11
Louisiana	174,160,000	163,139,000	+ 7.0	1.05
Maine	117,765,000	107,583,000	+ 9.5	.71
Maryland	205,674,000	191,010,000	+ 7.6	1.24
Mass.	588,826,000	561,164,000	+ 5.0	3.55
Michigan	787,865,000	740,297,000	+ 6.3	4.75
Minnesota	436,228,000	401,723,000	+ 8.7	2.63
Mississippi	131,034,000	115,637,000	+13.5	.79
Missouri	487,647,000	465,876,000	+ 4.8	2.94
Montana	86,250,000	69,844,000	+23.7	.52
Nebraska	223,920,000	194,698,000	+15.0	1.35
Nevada	23,221,000	20,629,000	+12.6	.14
New Hamp.	71,323,000	65,871,000	+ 8.3	.43
New Jersey	736,447,000	700,779,000	+ 5.2	4.44
New Mexico	54,736,000	48,342,000	+13.3	.33
New York	1,567,437,000	1,541,989,000	+ 1.8	9.45
N. Carolina	275,338,000	241,416,000	+14.0	1.66
N. Dakota	104,496,000	99,725,000	+ 4.9	.63
Ohio	957,049,000	886,640,000	+ 8.0	5.77
Oklahoma	301,877,000	275,100,000	+ 9.8	1.82
Oregon	165,865,000	158,904,000	+ 4.5	1.00
Penna.	1,132,867,000	1,048,463,000	+ 8.2	6.83
Rhode Island	109,472,000	100,202,000	+ 9.4	.66
S. Carolina	131,034,000	111,940,000	+ 7.1	.79
S. Dakota	109,472,000	100,340,000	+ 9.4	.66
Tennessee	213,968,000	185,164,000	+15.5	1.29
Texas	865,822,000	774,413,000	+11.9	5.22
Utah	66,347,000	54,705,000	+21.1	.40
Vermont	48,101,000	44,151,000	+ 9.0	.29
Virginia	258,751,000	233,439,000	+11.0	1.56
Washington	262,069,000	236,690,000	+10.8	1.58
W. Virginia	145,962,000	129,082,000	+13.0	.88
Wisconsin	426,276,000	387,490,000	+10.0	2.57
Wyoming	44,784,000	35,466,000	+26.1	.27
Total	16,586,635,000	15,440,919,000	+ 7.4	100.00

Average Wholesale Price of Passenger Cars and Trucks

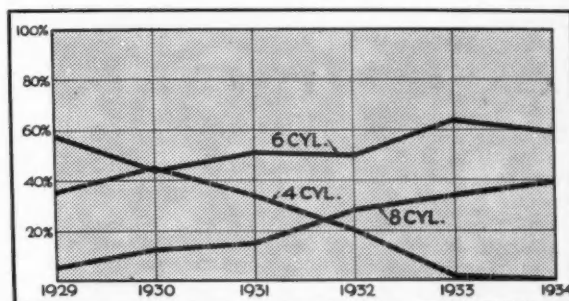
(Based on Units and Value of Production)

	Passenger Cars	Trucks
1921	\$720	\$1,035
1922	660	834
1923	607	745
1924	618	753
1925	656	843
1926	695	842
1927	735	875
1928	673	781
1929	622	720
1930	591	678
1931	566	629
1932	548	580
1933	489	536
1934	497	522

Imports of Motor Vehicles Into United States

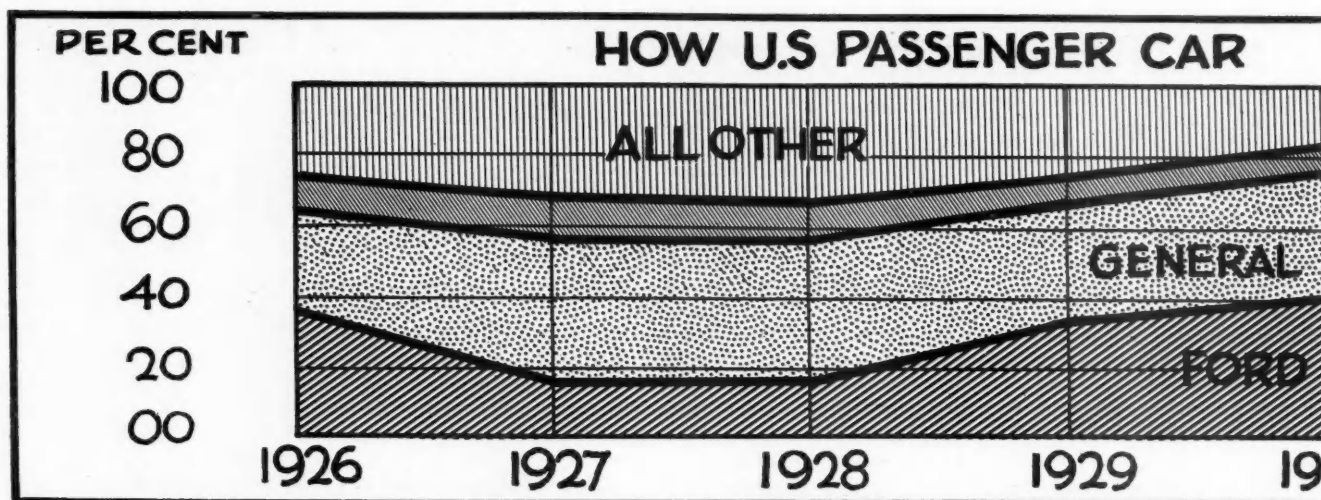
	No.	Value
1918.....	105	\$75,136
1919.....	117	123,025
1920.....	926	1,026,518
1921.....	522	876,163
1922.....	483	802,285
1923.....	853	884,125
1924.....	604	841,524
1925.....	678	1,079,560
1926.....	813	1,352,984
1927.....	635	1,218,938
1928.....	566	1,201,323
1929.....	750	1,190,140
1930.....	709	875,146
1931.....	736	769,033
1932.....	540	251,206
1933.....	534	298,126
1934.....	589	187,884

Division of Passenger Car Production By Number of Engine Cylinders



	Per Cent Fours	Per Cent Sixes	Per Cent Eights	Per Cent Twelves	Per Cent Sixteens
1926	64.0	34.0	2.0	...	...
1927	49.7	47.1	3.2	...	...
1928	48.6	47.0	4.4	...	...
1929	37.5	57.0	5.5	...	...
1930	44.4	43.3	12.1	*0.20	...
1931	33.2	51.8	14.8	0.17	0.03
1932	20.7	50.5	28.2	0.52	0.08
1933	2.0	63.6	34.0	0.33	0.07
1934	0.5	59.5	39.8	*0.20	...

*Including sixteens.



1934 New Car Sales in U. S.

NEW CAR REGISTRATIONS

	1929	1930	1931	1932	1933	1934
Auburn	17,850	11,270	29,536	11,646	5,038	5,536
Austin .....	.....	4,354	2,941	.....	3,675	1,057
Buick	*172,307	*122,656	90,873	49,708	43,809	63,067
Cadillac	14,936	12,078	11,136	6,269	3,903	4,899
Chevrolet	780,011	618,884	583,429	322,860	474,493	534,906
Chrysler	84,518	60,908	52,650	26,016	28,677	28,052
Continental .....	.....	.....	.....	.....	3,310	953
Cord	799	1,879	1,416	335	.....	.....
DeSoto	59,614	35,267	28,430	25,311	21,260	11,447
DeVaux .....	.....	.....	4,808	1,358	.....	.....
Dodge	115,773	64,105	53,090	28,111	86,062	90,139
Durant	47,715	21,440	7,229	1,135	.....	.....
Ford	1,310,135	1,055,097	528,581	258,927	311,113	530,528
Franklin	10,704	7,482	3,881	1,829	1,329	360
Graham	60,487	30,140	19,209	12,858	10,128	12,887
Hudson	62,692	30,466	19,189	8,641	2,946	19,307
Hupmobile	44,337	24,307	17,427	10,794	6,726	6,566
La Fayette .....	.....	.....	.....	.....	.....	9,301
La Salle	20,290	11,262	6,883	3,848	3,709	5,182
Lincoln	6,151	4,356	3,466	3,179	2,112	2,061
Marmon	*22,323	*12,369	5,687	1,365	86	.....
Nash	105,146	51,086	39,366	20,233	11,353	14,315
Oakland	31,830	21,648	12,985	.....	.....	.....
Oldsmobile	*93,483	*50,510	*46,983	24,128	35,295	71,676
Packard	44,634	28,318	16,256	11,058	9,081	6,552
Pierce-Arrow	8,386	6,795	4,522	2,692	2,152	1,740
Plymouth	84,969	64,301	94,289	111,926	249,667	302,557
Pontiac	158,272	68,389	73,148	47,926	85,348	72,645
Reo	17,319	11,450	6,762	3,870	3,623	3,854
Rockne .....	.....	.....	2	16,966	14,554	.....
Studebaker	82,839	56,526	46,533	25,002	21,688	41,560
Terraplane (Essex)	191,331	63,338	42,545	28,778	35,831	40,510
Willys-Whippet	162,366	51,687	42,936	22,483	15,314	6,576
Willys-Knight	37,343	14,079	8,405	3,415	353	.....
Miscellaneous	31,646	9,532	3,548	3,732	1,159	324
Total	3,880,206	2,625,979	1,908,141	1,096,399	1,493,794	1,888,557

BY MANUFACTURING GROUPS

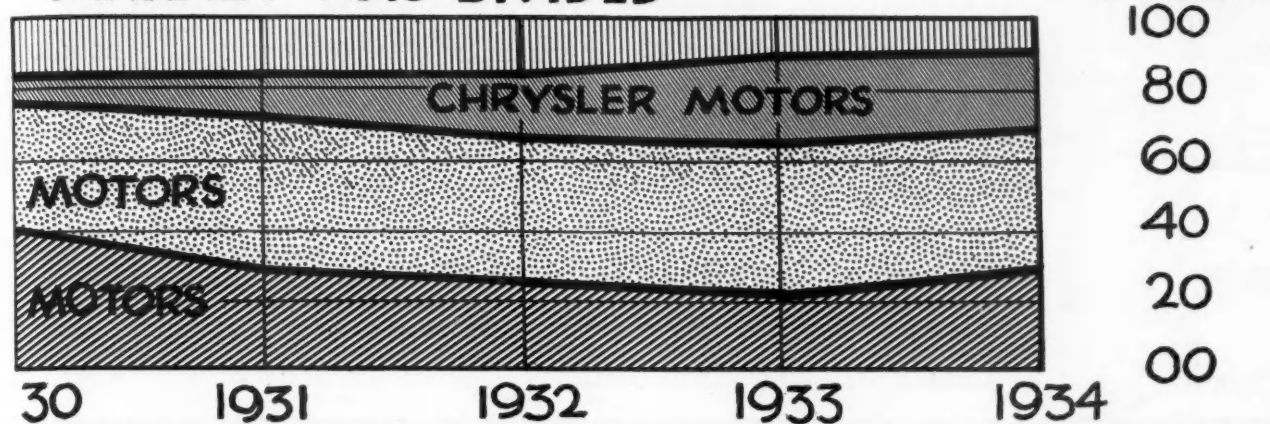
	1929	1930	1931	1932	1933	1934
Chrysler Corp.	344,874	224,581	228,459	191,364	385,666	432,195
Ford Motor Co.	1,316,286	1,059,453	532,047	262,106	313,225	532,589
General Motors	1,271,129	905,427	825,437	454,739	646,556	752,375
All Others	947,917	436,518	322,198	98,190	148,347	171,398

*1929-1930

Buick includes Marquette.
Marmon includes Roosevelt.
Oldsmobile includes Viking.

Miscellaneous includes Gardner, Jordan,
Windsor, Peerless, Stutz, Blackhawk and
others.

MARKET WAS DIVIDED

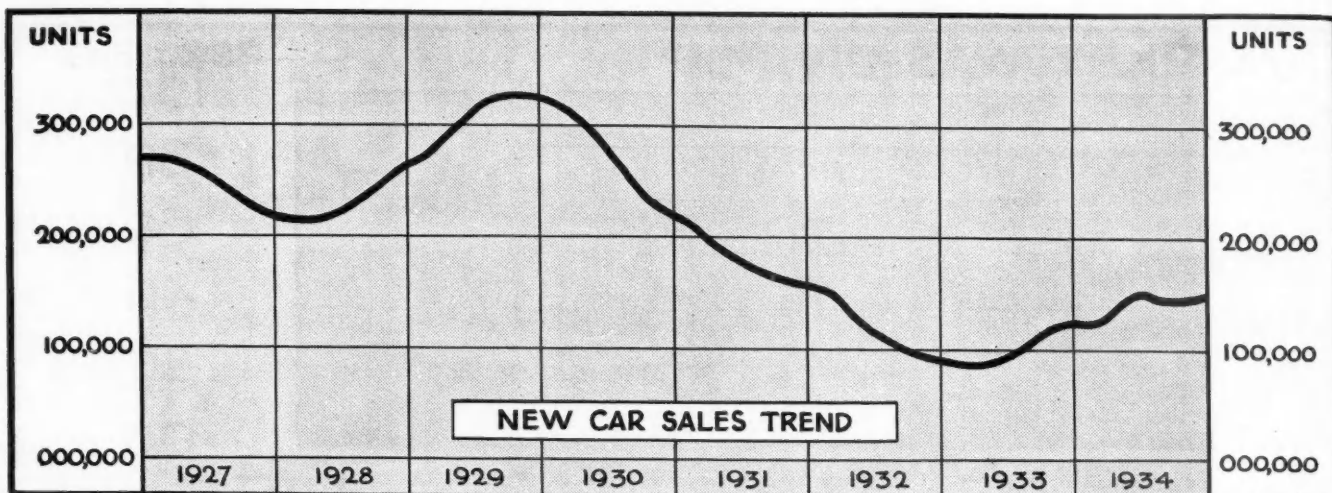


Are Largest in Three Years

	PER CENT OF TOTAL						RANK					
	1929	1930	1931	1932	1933	1934	1929	1930	1931	1932	1933	1934
Auburn .....	.46	.43	1.55	1.06	.34	.29	23	24	13	16	18	19
Austin .....	....	.17	.15	....	.25	.06	..	29	30	..	21	25
Buick	4.44	4.67	4.76	4.53	2.93	3.34	4	3	4	4	6	7
Cadillac .....	.38	.46	.58	.57	.26	.26	25	22	20	20	19	21
Chevrolet	20.10	23.57	30.59	29.46	31.77	28.32	2	2	1	1	1	1
Chrysler	2.18	2.32	2.76	2.37	1.92	1.49	11	8	7	8	9	10
Continental .....	....	....	....	....	.22	.05	..	..	..	..	23	26
Cord .....	.02	.07	.07	.03	....	....	29	30	31	30	..	..
DeSoto	1.54	1.34	1.49	2.31	1.42	.61	15	13	14	9	11	14
De Vaux .....	....	....	.25	.12	....	....	..	..	26	28	..	..
Dodge	2.98	2.44	2.78	2.56	5.76	4.77	7	6	6	7	4	4
Durant	1.23	.82	.38	.10	....	....	16	19	22	29	..	..
Ford	33.76	40.18	27.70	23.62	20.83	28.09	1	1	2	2	2	2
Franklin .....	.28	.28	.20	.17	.09	.02	26	26	28	26	27	27
Graham	1.56	1.15	1.01	1.17	.68	.68	14	15	15	15	15	13
Hudson	1.62	1.16	1.01	.79	.20	1.02	13	14	16	19	24	11
Hupmobile	1.14	.93	.91	.98	.45	.35	18	17	17	18	17	17
La Fayette .....	....	....	....	....	....	.49	..	..	..	..	..	15
La Salle .....	.52	.43	.36	.25	.25	.27	22	25	23	22	20	20
Lincoln .....	.16	.17	.18	.29	.14	.11	28	28	29	24	26	23
Marmon .....	.58	.47	.30	.12	.01	....	21	21	25	27	29	..
Nash	2.71	1.95	2.06	1.85	.76	.76	8	11	12	13	14	12
Oakland .....	.82	.82	.68	....	....	....	20	18	19	..	..	..
Oldsmobile	2.41	1.92	2.46	2.20	2.36	3.80	9	12	8	11	8	6
Packard	1.15	1.08	.85	1.01	.61	.35	17	16	18	17	16	18
Pierce-Arrow .....	.22	.26	.24	.25	.14	.09	27	27	27	25	25	24
Plymouth	2.19	2.45	4.94	10.21	16.71	16.02	10	5	3	3	3	3
Pontiac	4.08	2.60	3.83	4.37	5.71	3.85	6	4	5	5	5	5
Reo .....	.45	.44	.35	.35	.24	.20	24	23	24	21	22	22
Rockne .....	....	....	....	1.55	.97	....	..	..	..	14	13	..
Studebaker	2.13	2.15	2.44	2.28	1.45	2.20	12	9	9	10	10	8
Terraplane (Essex)	4.93	2.41	2.23	2.62	2.40	2.15	3	7	11	6	7	9
Willys-Whippet	4.18	1.97	2.25	2.05	1.03	.35	5	10	10	12	12	16
Willys-Knight .....	.96	.54	.44	.31	.02	....	19	20	21	23	28	..
Miscellaneous .....	.82	.35	.20	.35	.08	.01	..	..	..	..	..	..
Total	100.00	100.00	100.00	100.00	100.00	100.00						

BY MANUFACTURING GROUPS												
Chrysler Corp.	8.89	8.55	11.97	17.45	25.82	22.89	4	3	3	3	2	2
Ford Motor Co.	33.92	40.34	27.88	23.91	20.97	28.20	1	1	2	2	3	3
General Motors	32.75	34.48	43.26	41.48	43.28	39.84	2	2	1	1	1	1
All Others	24.44	16.63	16.89	17.16	9.93	9.07	3	4	4	4	4	4

*1931—
Oldsmobile includes Viking.
Miscellaneous includes Stutz and others.



The chart shows the 12 months' monthly moving average of passenger car sales in the United States

U. S. Sales of New Cars and Trucks by Months for 10 Years*

U. S. New Passenger Car Registrations

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan.	164,769	193,748	174,638	136,071	219,760	180,094	126,776	87,493	79,821	61,242	Jan.
Feb.	158,817	162,907	179,920	165,537	235,590	211,645	134,133	82,813	69,464	94,887	Feb.
Mar.	249,971	276,619	260,134	254,214	377,802	298,824	200,841	92,192	78,741	173,287	Mar.
Apr.	350,533	388,024	329,687	332,056	481,675	357,064	265,732	121,093	119,909	223,050	Apr.
May	339,794	396,504	317,932	351,459	454,132	345,031	247,727	131,282	160,242	219,225	May
June	309,512	319,788	268,066	317,069	386,398	260,861	201,911	148,752	174,190	223,864	June
July	319,964	360,700	250,315	324,120	432,503	254,098	194,322	104,188	185,660	229,006	July
Aug.	261,307	306,790	245,961	329,674	376,886	203,737	155,744	93,457	178,661	193,198	Aug.
Sept.	193,169	267,471	187,678	271,821	304,452	175,286	124,903	81,893	157,976	146,931	Sept.
Oct.	247,002	241,094	185,383	284,939	288,697	150,219	102,659	63,195	136,326	140,937	Oct.
Nov.	193,922	161,013	134,635	211,736	183,756	93,066	75,829	44,358	94,180	107,574	Nov.
Dec.	154,876	153,743	89,189	160,883	138,555	96,054	77,564	45,683	58,624	75,356	Dec.
Total .	2,943,636	3,228,401	2,623,538	3,139,579	3,880,206	2,625,979	1,908,141	1,096,399	1,493,794	1,888,557	Total

U. S. New Truck Registrations

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan. ...	21,310	25,048	27,567	16,431	29,900	30,236	24,415	14,776	11,709	22,903	Jan.
Feb. ...	19,973	23,177	28,437	17,510	32,637	31,880	23,466	14,558	9,707	24,476	Feb.
Mar. ...	27,784	34,955	33,539	24,698	46,368	42,199	30,609	16,874	9,934	33,884	Mar.
Apr. ...	33,963	44,846	37,264	30,272	56,299	47,029	36,848	17,784	17,301	38,882	Apr.
May ...	31,835	37,761	33,966	32,468	52,874	43,286	33,496	18,696	20,925	39,831	May
June ...	27,709	33,223	28,495	29,155	45,114	33,531	28,496	17,876	23,254	34,768	June
July ...	33,033	39,191	28,359	31,844	57,943	39,904	30,102	14,731	30,642	37,490	July
Aug. ...	34,247	36,653	28,156	36,753	52,557	33,787	27,070	15,081	28,799	40,790	Aug.
Sept. ...	30,186	34,325	24,436	35,135	46,560	33,933	25,967	14,967	31,269	37,225	Sept.
Oct. ...	32,109	35,034	27,231	40,890	49,899	34,237	24,685	15,156	28,058	40,878	Oct.
Nov. ...	21,705	23,667	18,834	27,491	33,631	22,012	15,553	10,392	18,691	28,689	Nov.
Dec. ...	19,296	18,117	11,681	18,476	23,275	18,665	13,177	9,522	15,580	24,070	Dec.
Total .	333,150	385,997	327,965	341,123	527,057	410,699	313,884	180,413	245,869	403,886	Total

Total U. S. New Passenger Car and Truck Registrations

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	
Jan. ...	186,079	218,796	202,205	152,502	249,660	210,330	151,191	102,269	91,530	84,145	Jan.
Feb. ...	178,790	186,084	208,357	183,047	268,227	243,525	157,599	97,371	79,171	119,363	Feb.
Mar. ...	277,755	311,574	293,673	278,912	424,170	341,023	231,450	109,066	88,675	207,171	Mar.
Apr. ...	384,496	432,870	366,951	362,328	537,974	404,093	302,580	138,877	137,210	261,932	Apr.
May ...	371,629	434,265	351,898	383,927	507,006	388,317	281,223	149,978	181,167	259,056	May
June ...	337,221	353,011	296,561	346,224	431,512	294,392	230,407	166,628	197,444	258,632	June
July ...	352,997	399,891	278,674	355,964	490,446	294,002	224,424	118,919	216,302	266,496	July
Aug. ...	295,554	343,443	274,117	366,427	429,443	237,524	182,814	108,538	207,460	233,988	Aug.
Sept. ...	223,355	301,796	212,114	306,956	351,012	209,219	150,870	96,860	189,245	184,156	Sept.
Oct. ...	279,111	276,128	212,614	325,829	338,596	184,456	127,344	78,351	164,384	181,815	Oct.
Nov. ...	215,627	184,680	153,469	239,227	217,387	115,078	91,382	54,750	112,871	136,263	Nov.
Dec. ...	174,172	171,860	100,870	179,359	161,830	114,719	90,741	55,205	74,204	99,426	Dec.
Total .	3,276,786	3,614,398	2,951,503	3,480,702	4,407,263	3,036,678	2,222,025	1,276,812	1,739,663	2,292,443	Total

* R. L. Polk & Company.

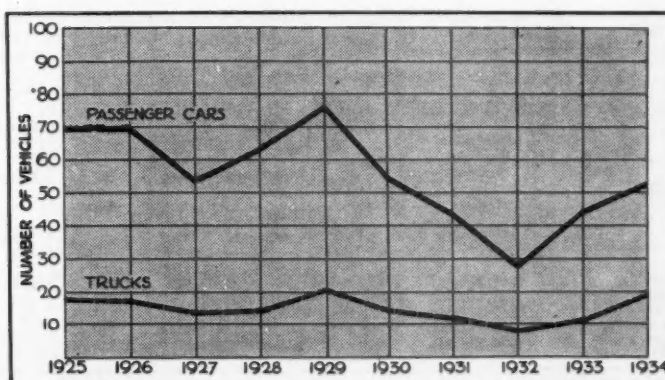
Sales Gain Most in South and West of Mississippi

New Motor Vehicle Sales by States

	Passenger Cars		Trucks		Total New Motor Vehicles		Per Cent of Total	Per Cent Increase— 1934 over 1933
	1934	1933	1934	1933	1934	1933		
Alabama	25,560	14,514	8,051	4,054	33,611	18,568	1.47	81.2
Arizona	6,472	3,625	2,167	1,086	8,639	4,711	.38	83.2
Arkansas	15,757	11,626	4,960	3,638	20,717	15,264	.90	35.8
California	116,121	98,068	20,496	13,788	136,617	111,856	5.96	22.2
Colorado	18,701	11,739	5,196	2,488	23,897	14,227	1.04	68.0
Connecticut	27,347	24,213	6,124	4,246	33,471	28,459	1.46	17.6
Delaware	4,868	4,119	1,115	828	5,983	4,947	.26	21.0
Dist. of Col.	18,523	14,375	1,979	1,362	20,502	15,737	.89	30.2
Florida	26,717	17,924	8,046	4,186	34,763	22,110	1.52	57.1
Georgia	33,235	24,119	7,921	5,260	41,156	29,379	1.80	40.2
Idaho	7,216	3,463	2,817	1,545	10,033	5,008	.44	100.0
Illinois	109,287	85,460	17,584	11,764	126,871	97,224	5.53	30.6
Indiana	53,147	40,176	11,123	6,121	64,270	46,297	2.80	39.0
Iowa	38,619	25,866	9,860	5,449	48,479	31,315	2.11	55.0
Kansas	32,935	24,238	7,170	4,292	40,105	28,530	1.75	40.8
Kentucky	25,889	20,316	6,815	4,195	32,704	24,511	1.43	33.5
Louisiana	23,272	16,300	5,359	2,882	28,631	19,182	1.25	49.2
Maine	11,573	10,494	4,262	2,614	15,835	13,108	.69	20.7
Maryland	24,930	20,193	5,457	3,818	30,387	24,011	1.33	26.5
Massachusetts	70,536	63,248	12,887	9,511	83,423	72,759	3.64	14.7
Michigan	109,773	85,682	16,281	9,085	126,054	94,767	5.50	34.0
Minnesota	87,573	30,829	9,255	5,722	46,828	36,551	2.04	28.2
Mississippi	15,904	10,628	5,414	2,752	21,318	13,380	.93	59.5
Missouri	55,585	45,773	12,920	8,535	68,505	54,308	2.99	26.1
Montana	9,789	6,056	4,215	2,055	14,004	8,111	.61	73.0
Nebraska	21,778	16,393	5,411	2,713	27,189	19,106	1.19	42.0
Nevada	2,457	1,328	638	233	3,095	1,561	.13	92.8
New Hampshire	7,911	6,597	2,731	1,783	10,642	8,380	.46	27.1
New Jersey	61,061	56,438	11,016	7,401	72,077	63,839	3.14	12.9
New Mexico	6,298	3,716	3,578	1,395	9,876	5,111	.43	93.0
New York	179,335	175,763	30,383	20,200	209,718	195,963	9.15	7.0
North Carolina	45,951	29,191	11,185	6,597	57,136	35,788	2.49	59.5
North Dakota	7,693	5,263	2,389	1,107	10,082	6,370	.44	57.0
Ohio	128,445	101,213	20,487	11,150	148,932	112,363	6.50	32.7
Oklahoma	39,377	28,914	8,944	4,941	48,321	33,855	2.11	43.0
Oregon	14,309	10,123	3,780	2,488	18,089	12,611	.79	43.0
Pennsylvania	147,165	121,425	29,891	19,991	177,056	141,416	7.72	25.6
Rhode Island	11,835	10,749	2,035	1,598	13,870	12,347	.60	12.2
South Carolina	19,896	14,591	4,228	2,604	24,124	17,195	1.05	40.2
South Dakota	7,197	4,849	2,252	996	9,449	5,845	.41	62.7
Tennessee	28,077	19,880	6,366	3,623	34,443	23,503	1.50	46.3
Texas	106,622	80,447	24,854	13,889	131,476	94,336	5.74	39.7
Utah	6,887	4,704	2,530	1,568	9,417	6,272	.41	50.0
Vermont	4,892	3,774	2,048	1,311	6,940	5,085	.30	36.3
Virginia	31,372	22,180	8,508	5,667	39,880	27,847	1.74	43.5
Washington	23,120	16,633	6,199	4,002	29,319	20,635	1.28	42.2
West Virginia	22,029	15,326	5,847	2,988	27,876	18,314	1.22	52.0
Wisconsin	41,008	28,308	9,313	5,411	50,321	33,719	2.20	49.2
Wyoming	4,513	2,945	1,799	937	6,312	3,882	.28	62.8
Total	1,888,557	1,493,794	403,886	245,869	2,292,443	1,739,663	100.00	31.7

New Motor Vehicle Sales Per Dealer

	Passenger Cars		Trucks	
	Units per Dealer	Average Volume per Dealer	Units per Dealer	Average Volume per Dealer
1924	37	\$30,488	13	\$13,000
1925	69	60,375	17	19,091
1926	69	63,825	17	19,074
1927	53	51,993	12	14,016
1928	63	56,637	14	14,574
1929	75	62,250	20	19,220
1930	55	43,340	14	12,656
1931	45	34,425	12	10,056
1932	29	20,880	8	6,208
1933	44	28,700	11	7,850
1934	53	35,200	19	13,250



Public Paid \$1,299,400,000 for New Cars in 1934

U. S. New Car Registrations and Estimated Dollar Volume by Retail Price Classes: 1934, 1932 and 1932 Compared

	Units			Per Cent of Total		
	1934	1933	1932	1934	1933	1932
Chevrolet, Ford and Plymouth	1,368,099	1,035,273	693,713	72.45	69.36	63.49
Others under \$750	80,384	250,982	84,619	4.26	16.81	7.74
\$751-\$1,000	359,170	116,509	184,425	19.02	7.81	16.88
\$1,001-\$1,500	52,278	57,563	76,720	2.77	3.86	7.02
\$1,501-\$2,000	13,427	12,043	26,099	.71	.81	2.39
\$2,001-\$3,000	10,913	15,025	18,676	.58	1.00	1.71
\$3,001 and over	4,087	5,240	8,415	.21	.35	.77
Total	1,888,358	1,492,635	1,092,667	100.00	100.00	100.00
Miscellaneous	199	1,159	3,732			
Total	1,888,557	1,493,794	1,096,399			

	Estimated Dollar Volume			Per Cent of Total		
	1934	1933	1932	1934	1933	1932
Chevrolet, Ford and Plymouth	\$827,500,000	\$571,000,000	\$408,000,000	63.68	58.49	48.40
Others under \$750	54,000,000	163,400,000	58,000,000	4.16	16.74	6.88
\$751-\$1,000	286,600,000	96,600,000	161,000,000	22.06	9.89	19.10
\$1,001-\$1,500	63,900,000	66,900,000	93,000,000	4.92	6.85	11.03
\$1,501-\$2,000	24,200,000	19,900,000	44,000,000	1.86	2.04	5.22
\$2,001-\$3,000	27,800,000	37,300,000	48,000,000	2.14	3.82	5.69
\$3,001 and over	15,400,000	21,200,000	31,000,000	1.18	2.17	3.68
Total	\$1,299,400,000	\$976,300,000	\$843,000,000	100.00	100.00	100.00

New Truck Registrations by Makes

Makes	New Truck Registrations				Per Cent of Total				Rank			
	1934	1933	1932	1931	1934	1933	1932	1931	1934	1933	1932	1931
Austin	494	1,053	.....	.....	.12	.42	.....	.....	16	14	..	..
Autocar	1,139	1,127	1,015	1,748	.28	.46	.56	.56	13	13	13	12
Brockway	1,213	875	752	1,685*	.30	.36	.42	.54	12	15	16	13
Chevrolet	157,544	99,880	60,784	99,600	38.99	40.62	33.69	31.74	1	1	2	2
Diamond T ...	5,440	4,139	2,250	2,483	1.35	1.68	1.25	.79	6	6	8	11
Dodge	48,252	28,034	8,744	13,518	11.94	11.40	4.85	4.31	3	3	4	4
Federal	1,962	1,360	1,167	1,523	.49	.55	.65	.48	9	11	11	14
Ford	128,288	62,397	66,937	138,854	31.76	25.38	37.10	44.25	2	2	1	1
G. M. C.	10,449	6,602	6,359	6,919	2.59	2.69	3.52	2.20	5	5	5	5
Indiana	729	1,252	957	.....	.18	.51	.53	.....	15	12	14	..
International .	31,555	26,658	15,752	21,073	7.81	10.84	8.73	6.72	4	4	3	3
Mack	1,830	1,652	1,425	2,945	.45	.67	.79	.94	10	9	10	9
Reo	5,035	3,042	3,187	5,166	1.25	1.24	1.77	1.65	7	7	6	6
Sterling	134	108	227	739	.03	.04	.13	.23	17	18	17	16
Stewart	736	684	867	1,394	.18	.28*	.48	.44	14	16	15	15
Studebaker ...	1,697	2,407†	2,430	3,495	.42	.98	1.35	1.11	8	8	7	7
White	3,963	1,384	2,138	2,561	.98	.56	1.19	.82	8	10	9	10
Willys	25	233	1,132	3,131	.01	.09	.63	1.00	18	17	12	8
Miscellaneous .	3,401	2,982	4,290	7,050	.86	1.23	2.36	2.22	..	..	..	..
Total	403,886	245,869	180,413	313,884	100.00	100.00	100.00	100.00	..	..	..	..

*Includes Indiana.
†Includes Rockne.

New and Used Car Financing Data

Statistics on automobile financing, based on data reported to the Bureau of Census by *313 automobile financing organizations in 1932, and 282 identical organizations for 1933-'34. The changes in number of organizations included have not greatly affected the totals.

YEAR	Wholesale Financing Volume in Dollars	RETAIL FINANCING											
		TOTAL			NEW CARS			USED CARS			UNCLASSIFIED		
		Number of Cars	Volume and Average		Number of Cars	Volume and Average		Number of Cars	Volume and Average		Number of Cars	Volume and Average	
			Total Amount	Per Car		Total Amount	Per Car		Total Amount	Per Car		Total Amount	Per Car
1930	\$660,978,901	2,933,973	\$1,201,341,267	\$409	1,287,796	\$730,417,562	\$567	1,558,932	\$435,989,399	\$280	87,245	\$34,934,306	\$400
1931	554,440,655	2,448,245	950,301,958	388	1,006,875	558,158,290	554	1,370,655	366,774,095	268	70,715	25,369,573	359
1932	330,267,440	1,521,988	535,625,105	352	537,986	293,803,672	546	938,320	226,581,684	241	45,682	15,239,749	334
1933	479,984,028	1,711,130	596,453,758	349	728,571	375,712,921	516	943,473	208,359,170	221	39,066	12,881,667	317
1934	890,238,563	2,283,587	853,431,268	374	1,014,664	559,167,458	551	1,221,917	277,723,191	227	47,006	16,540,619	352

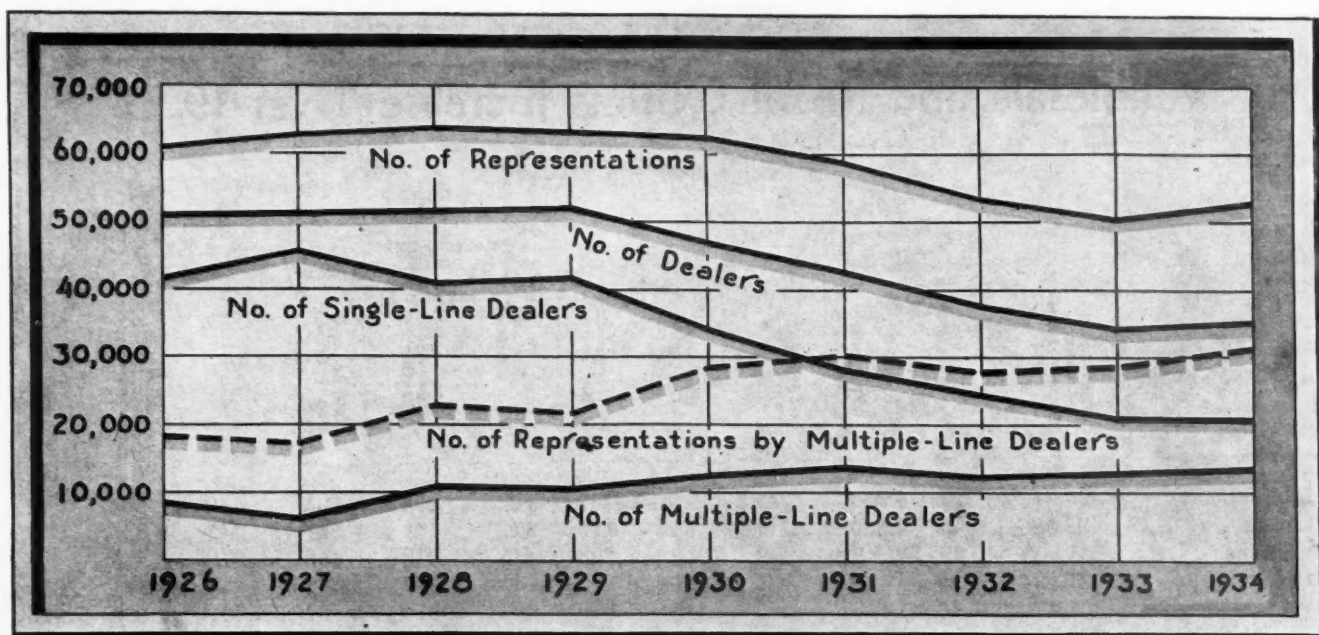
*365 establishments for 1930 and 1931.

Wholesale and Retail Outlets Increase Over 1933

Sales Outlets by States

State	Total Motor Vehicle Registrations, 1934	Wholesale Data		RETAIL DATA								All Retail Outlets (Duplications Eliminated)	Truck Fleet Owners (10 or more vehicles)*
		No. of Wholesalers*	Motor Vehicles Per Wholesaler	Total Car and Truck Dealers*	Exclusive Truck Dealers*	Total Passenger Car Dealers*	Motor Vehicles Per Car and Truck Dealer	Car Dealer Service Stations*	Independent Repair Shops*	Total Repair Shops*			
Alabama	225,276	53	4,250	317	5	312	722	295	565	860	908	121	
Arizona	96,586	22	4,380	111	1	110	877	101	241	342	361	63	
Arkansas	205,000	49	4,185	329	6	323	635	312	566	878	915	65	
California	2,021,924	489	4,140	1,740	90	1,650	1,740	1,587	6,068	7,655	8,521	1,134	
Colorado	264,421	65	4,160	387	8	379	696	374	657	1,031	1,079	160	
Connecticut	354,741	101	3,500	521	17	504	535	490	720	1,210	1,366	514	
Delaware	54,145	9	6,015	66	5	61	820	59	80	139	167	83	
Dist. of Col.	180,642	24	7,050	69	4	65	2,770	65	123	188	209	152	
Florida	333,350	104	3,200	408	9	399	835	386	955	1,341	1,393	222	
Georgia	376,993	75	5,100	513	8	505	745	488	783	1,271	1,316	170	
Idaho	97,500	27	3,610	230	5	225	430	223	322	545	555	26	
Illinois	1,463,930	327	4,465	2,236	75	2,161	677	2,138	3,775	5,913	6,184	1,790	
Indiana	790,900	182	4,340	1,188	42	1,146	690	1,135	1,951	3,086	3,241	483	
Iowa	663,942	143	4,640	1,455	39	1,416	469	1,340	1,826	3,166	3,382	192	
Kansas	525,500	120	4,370	1,124	41	1,083	485	1,040	1,399	2,439	2,593	129	
Kentucky	319,645	67	4,770	603	16	587	544	570	727	1,297	1,381	173	
Louisiana	243,639	63	3,960	303	8	295	825	296	521	817	863	208	
Maine	178,116	44	4,050	353	6	347	513	336	570	906	930	96	
Maryland	332,159	62	5,350	416	15	401	827	399	517	910	962	310	
Massachusetts ..	785,392	223	3,520	1,028	35	993	790	923	1,662	2,585	2,905	956	
Michigan	1,148,953	205	5,560	1,664	38	1,626	701	1,566	2,545	4,111	4,388	907	
Minnesota	697,211	105	6,640	1,349	21	1,328	525	1,294	1,843	3,137	3,338	358	
Mississippi	166,500	40	4,150	326	7	319	366	313	367	680	714	35	
Missouri	739,813	175	4,210	1,077	22	1,055	700	1,024	2,130	3,154	3,380	570	
Montana	130,214	33	3,940	340	19	321	405	317	431	748	769	34	
Nebraska	396,200	80	4,950	1,032	42	990	400	928	1,218	2,146	2,331	138	
Nevada	31,400	7	4,490	112	1	111	283	103	90	193	217	11	
New Hampshire ..	113,172	29	3,900	209	7	202	560	202	345	547	549	63	
New Jersey ...	864,570	179	4,825	998	53	945	914	929	2,227	3,156	3,432	828	
New Mexico ...	82,847	20	4,140	136	2	134	618	132	187	319	324	21	
New York	2,295,646	599	3,830	2,668	138	2,530	905	2,411	5,846	8,257	8,977	1,467	
North Carolina ..	382,308	85	4,500	597	20	577	662	574	850	1,424	1,485	177	
North Dakota ..	161,201	27	5,960	559	22	537	300	502	510	1,012	1,097	22	
Ohio	1,603,000	393	4,070	2,147	75	2,072	773	2,008	3,446	5,454	5,894	756	
Oklahoma	457,000	99	4,610	678	12	666	685	646	978	1,624	1,757	167	
Oregon	277,800	80	3,460	353	11	342	810	338	994	1,332	1,419	118	
Pennsylvania ..	1,683,737	421	4,080	2,989	136	2,853	590	2,875	5,150	8,025	8,468	1,712	
Rhode Island ..	143,409	31	4,610	143	5	138	1,030	133	300	433	492	223	
South Carolina ..	165,150	40	4,125	292	4	288	574	285	418	703	683	72	
South Dakota ..	168,225	25	6,820	441	23	418	402	411	589	1,000	1,060	28	
Tennessee	342,300	74	4,615	357	7	350	980	341	758	1,099	1,104	204	
Texas	1,253,012	287	4,350	1,612	40	1,572	796	1,546	3,056	4,602	4,470	559	
Utah	102,000	31	3,290	167	4	163	626	161	400	561	641	64	
Vermont	77,921	22	3,530	183	6	177	440	174	350	524	546	16	
Virginia	366,338	73	5,010	605	23	582	629	590	1,085	1,675	1,714	186	
Washington ...	422,240	133	3,170	555	20	535	790	520	1,746	2,266	2,391	207	
West Virginia ..	193,660	69	2,805	464	23	441	437	439	745	1,184	1,281	143	
Wisconsin	706,781	136	5,190	1,608	39	1,569	453	1,529	1,732	3,261	3,478	341	
Wyoming	65,235	10	6,500	180	6	174	375	172	160	332	361	17	
Total	24,751,644	5,757	4,300†	37,238	1,261	35,977	679†	35,020	64,518	99,538	105,991	16,491	

* Chilton Trade List. † Average.



The Roll Call of Passenger Car Dealers*

(End-of-the-Year Figures)

	1926	1927	1928	1929	1930	1931	1932	1933	1934
Number of Dealers	50,868	51,440	50,984	51,560	47,144	42,881	38,092	34,129	35,977
Number of Representatives*	60,378	62,387	62,872	63,054	62,741	59,173	53,437	50,028	53,602
Number of Single-Line Dealers ...	41,799	45,464	40,314	41,368	34,044	28,594	25,006	20,965	21,659
Number of Multiple-Line Dealers...	9,069	5,976	10,670	10,192	13,100	14,287	13,086	13,164	14,316
Number of Representatives by Multiple-Line Dealers	18,579	16,923	22,558	21,686	28,697	30,579	28,431	29,063	31,943

*There are more representatives than dealers because some dealers represent more than one line.

Passenger Car Representations by Makes*

(End-of-the-Year Figures)

	1926	1927	1928	1929	1930	1931	1932	1933	1934
Plymouth	—	—	—	—	7,218	7,351	6,276	7,642	9,537
Chevrolet	7,738	8,381	8,987	9,553	9,558	9,412	9,039	8,885	8,578
Ford	9,376	9,375	8,731	8,598	8,833	8,735	8,280	7,480	7,388
Total Chevrolet, Plymouth and Ford	17,114	17,756	17,718	18,151	25,609	25,498	23,595	24,007	25,503
Chrysler	2,975	3,455	3,647	3,337	3,007	3,454	2,999	3,511	4,360
Dodge	3,692	3,667	3,212	2,994	2,842	2,663	2,722	2,772	3,297
Hudson	3,842	3,754	3,508	3,488	2,863	2,270	1,761	1,842	2,641
Pontiac	2,627	3,273	4,386	4,545	3,435	2,887	2,503	2,336	2,314
Buick	3,614	3,597	3,533	3,241	3,003	2,608	2,472	2,273	2,303
Studebaker	2,850	2,546	2,262	2,242	1,971	1,999	1,927	1,733	1,986
De Soto	—	—	307	1,133	1,369	1,234	1,252	1,359	1,880
Oldsmobile	1,685	1,845	1,656	1,668	1,592	1,426	1,351	1,418	1,611
Nash	2,196	2,280	1,986	2,123	1,884	1,677	1,430	1,201	1,283
Reo	1,112	1,093	1,119	870	772	1,079	756	368	813
Graham	1,955	1,389	1,492	1,751	1,469	1,206	1,079	920	782
Hupmobile	1,356	1,291	1,265	1,296	1,084	991	854	699	763
Cadillac	823	815	762	722	700	654	602	563	541
Auburn	448	452	525	702	581	1,117	780	477	518
Packard	750	739	762	776	721	682	624	540	486
Pierce-Arrow	271	244	214	266	312	449	385	350	243
Total except Chevrolet, Plymouth and Ford	30,196	30,440	30,636	31,154	27,605	26,396	23,497	22,362	25,821
Miscellaneous and Unclassified	13,068	14,191	14,518	13,749	9,527	7,279	6,345	3,659	2,278
Grand Total Representations..	60,378	62,387	62,872	63,054	62,741	59,173	53,437	50,028	53,602

*Data from Chilton Trade List

Dealer Representations by Population Groups*

	10,000 and Under		10,000—50,000		50,000—100,000		Over 100,000		Total Representations	
	1933	1934	1933	1934	1933	1934	1933	1934	1933	1934
Auburn	177	163	150	170	45	51	105	134	477	518
Buick	1,477	1,481	531	547	97	88	168	187	2,273	2,303
Cadillac	169	157	247	234	58	60	89	90	563	541
Chevrolet	7,316	7,273	704	714	118	127	447	464	8,885	8,578
Chrysler	2,559	3,308	586	653	88	102	278	297	3,511	4,360
De Soto	638	1,061	412	494	81	95	228	230	1,359	1,880
Dodge	1,816	2,259	568	630	98	97	290	311	2,772	3,297
Ford	6,190	6,060	666	677	125	135	499	516	7,480	7,388
Graham	398	311	278	250	77	81	167	140	920	782
Hudson	1,047	1,589	467	597	95	116	233	339	1,842	2,641
Hupmobile	287	281	219	275	56	68	137	139	699	763
Nash	602	587	354	410	71	80	174	206	1,201	1,283
Oldsmobile	829	927	358	406	77	78	154	200	1,418	1,611
Packard	137	114	241	214	65	57	97	101	540	486
Pierce-Arrow	88	46	141	99	38	28	83	70	350	243
Plymouth	5,013	6,628	1,566	1,777	267	294	796	838	7,642	9,537
Pontiac	1,540	1,473	507	530	82	89	207	222	2,336	2,314
Reo	291	352	208	263	60	75	109	123	368	813
Studebaker	991	1,141	497	564	88	101	157	180	1,733	1,986
Miscellaneous	2,102	1,280	866	500	184	148	507	350	3,659	2,278
Total	33,667	36,491	9,566	10,004	1,870	1,970	4,925	5,137	50,028	53,602
Per Cent Change		+8%		+2%		+3%		+2%		+4%

Dealer Representations by Makes by States*

STATES	Auburn	Buick	Cadillac	Chevrolet	Chrysler	De Soto	Dodge	Ford	Graham	Hudson-Terraplane	Hupmobile	Nash	Oldsmobile	Packard	Pierce-Arrow	Plymouth	Pontiac	Reo	Studebaker	Miscellaneous	TOTAL
Alabama.....	1	14	5	93	37	8	17	94	2	23	4	7	8	2	2	62	9	2	9	22	421
Arizona.....		7	2	30	15	4	10	25		9		3	4	1	1	29	6	1	10	14	171
Arkansas.....		11	2	106	37	9	20	106	2	11	4	9	8	1	2	66	11	2	15	9	431
California.....	34	128	37	307	149	102	170	341	50	100	37	57	91	31	27	421	110	44	135	136	5,077
Colorado.....	9	31	5	83	55	9	40	78	3	32	4	10	15	2	2	104	22	12	19	21	556
Connecticut.....	18	39	15	67	56	32	52	52	19	49	33	23	28	11	8	140	46	21	34	34	777
Delaware.....	1	3	2	10	3	5	4	15		5	2	2	2	2	2	12	6	2	4	9	189
District of Columbia.....		2	1	7	7	6	7	12	1	7	2	2	3	1	1	20	3	2	3	6	93
Florida.....	7	26	13	80	58	25	31	99	7	24	10	13	15	10	4	114	24	13	21	43	636
Georgia.....	3	25	9	150	66	23	32	155	3	26	5	7	20	5	6	121	22	4	20	25	727
Idaho.....	4	13	1	55	26	9	29	56	5	13	4	9	4	1		64	6	4	21	10	334
Illinois.....	42	164	35	500	229	138	216	382	45	142	59	89	95	32	12	583	158	42	126	111	3,200
Indiana.....	18	78	13	262	140	85	101	202	20	108	21	38	72	10	5	326	91	25	52	80	1,747
Iowa.....	5	89	9	425	211	44	126	274	19	91	17	39	58	12	2	381	90	15	75	54	2,036
Kansas.....	6	53	10	290	126	54	101	241	11	80	14	32	41	6	2	281	64	18	54	44	1,528
Kentucky.....	4	34	4	146	83	31	62	135	12	42	15	13	20	6	1	176	27	9	28	33	881
Louisiana.....	2	9	1	90	24	14	22	100	1	10	2	12	7	2	1	60	13	3	11	12	396
Maine.....		18	6	57	40	11	32	61	12	48	4	25	13	7	3	83	20	18	23	18	499
Maryland.....	4	18	4	77	62	19	35	83	9	31	8	16	15	9	1	116	31	6	26	35	605
Massachusetts.....	14	53	22	164	112	48	86	148	27	116	31	59	45	24	14	246	51	43	60	56	1,419
Michigan.....	29	131	30	372	150	67	154	342	59	169	37	56	90	30	7	371	129	53	65	95	2,436
Minnesota.....	9	86	11	399	170	54	120	294	23	79	28	25	56	10	6	344	87	18	77	57	1,953
Mississippi.....	2	11	2	109	44	4	16	106	2	13	2	9	6	2	1	64	13	3	9	23	441
Missouri.....	7	48	10	336	125	61	110	203	15	53	13	34	32	6	3	296	57	20	38	50	1,517
Montana.....	1	29	6	86	38	11	38	73	5	19	6	12	18	1	2	87	26	9	27	29	523
Nebraska.....	6	48	5	270	140	53	102	239	7	55	7	20	49	3	1	295	38	8	56	25	1,427
Nevada.....	2	13	4	22	16	6	12	23	2	6	1	9	4	2	2	34	9	1	15	14	197
New Hampshire.....	2	17	2	43	26	7	18	41	8	19	6	12	7	4	1	51	10	9	10	8	301
New Jersey.....	32	67	40	150	88	62	86	150	28	67	40	51	41	24	12	236	88	41	74	81	1,458
New Mexico.....	1	14	1	40	19	3	7	31		12	2	2	2	2	1	29	6	4	8	8	192
New York.....	65	183	70	456	309	146	246	411	89	198	91	125	144	56	23	701	190	79	144	145	3,871
North Carolina.....	8	43	4	159	89	27	57	133	9	40	2	10	27	9	2	173	39	3	25	33	892
North Dakota.....	1	25	4	173	100	14	30	136		25	4	18	2	1	144	22	2	37	28	774	
Ohio.....	42	123	33	438	279	181	190	344	67	188	47	82	106	33	15	650	125	51	127	177	3,298
Oklahoma.....	8	38	7	187	58	19	58	187	5	45	3	7	29	6	2	135	42	2	29	31	898
Oregon.....	2	23	6	96	37	28	31	81	11	27	1	9	13	3	3	96	23	3	13	25	531
Pennsylvania.....	68	182	47	489	379	178	261	416	104	220	105	149	159	52	33	818	220	112	184	249	4,425
Rhode Island.....	1	10	3	28	16	10	21	14	4	15	5	11	5	4	1	47	10	8	11	8	232
South Carolina.....	4	19	2	85	29	12	26	78	2	20	4	3	13	3	3	67	18	3	12	8	408
South Dakota.....	1	27	1	124	51	16	37	110	3	20	7	10	19	2	1	104	19	3	19	52	626
Tennessee.....	2	12	5	101	47	16	36	87	4	24	5	5	14	6	3	99	15	2	14	19	516
Texas.....	9	85	14	484	183	50	129	435	8	82	12	24	38	13	5	362	82	14	58	119	2,206
Utah.....	3	8	1	34	15	7	11	44	3	16	6	6	4	2	1	33	6	3	11	11	225
Vermont.....	5	8	3	37	21	13	16	43	6	18	4	12	3	6	1	50	10	7	5	6	274
Virginia.....	5	34	8	157	67	18	52	159	7	44	11	13	16	4	5	137	34	6	22	36	835
Washington.....	5	33	5	133	58	28	56	119	13	46	6	12	31	7	5	142	30	8	34	37	808
West Virginia.....	6	30	7	102	67	24	40	80	14	36	6	16	21	7	8	131	31	23	21	51	721
Wisconsin.....	19	123	12	427	180	82	125	314	33	107	26	79	72	12	4	387	116	29	82	70	2,299
Wyoming.....	1	18	2	42	23	7	19	36	2	11		7	10			49	9	4	13	11	265
TOTAL.....	518	2,303	541	8,578	4,360	1,880	3,297	7,388	782	2,641	763	1,283	1,611	486	243	9,537	2,314	813	1,986	2,278	53,602

* Chilton Trade List.

Export and Aircraft Statistics Begin on Page 293

AUTOMOTIVE

AMERICAN PASSENGER

MAKE AND MODEL	Type No. of Cylinders, Bore and Stroke	Engine Mounting	Points of Suspension	Taxable H.P.	Piston Displacement (Cu. Ins.)	Wt. per Cu. In. 5 Pass-4 Door Sedan	H.P. per Cu. In.	Maximum Brake H.P. at Specified R.P.M.	B.M.E.P. at Maximum H.P.	Engine Revolutions per Mile	Wt. per H.P. 5 Pass-4 Door Sedan	Cylinder Head Material	COMPRESSION RATIO		VALVES						PISTONS						
													Standard	Optional	Arrangement	Seat Inserts Used ? Exhaust	Inlet Head Diameter (Ins.)	Inlet Seat Angle (Deg.)	Exhaust Head Diameter (Ins.)	Exhaust Seat Angle (Deg.)	Camshaft Drive (Make and Type)	Pin Diameter	Pin Locked In	Material	Weight of Piston and Rod Assembly (Lbs.)	Speed at Maximum H.P. (M.P. per Min.)	
Auburn.....	653	6-3 1/2 x 4 1/4	RFR.	4	22.5	209.9	15.7	.40	85-3500	91.8	3245	38.6	Al.	6.20	None.	L...	N.	1 1/2	30	1 1/2	45	W-ch...	7/8	R...	Als.	3.71	2770
Auburn.....	851	8-3 1/2 x 4 1/4	RFR.	4	30.0	279.9	12.9	.41	115-3600	90.6	3303	31.4	Al.	6.20	None.	L...	N.	1 1/2	30	1 1/2	45	W-ch...	7/8	R...	Als.	3.71	2850
Austin.....		4-2.2x3	R...		7.8	45.6	24.6	.28	13-3200	70.7		86.1	CI.	5.30	None.	L...	N.	2 1/2	45	2 1/2	45	-ge...	3/4	...	Al.		1600
Buick.....	35-40	8-3 1/2 x 3 1/2	RFR.	5	30.6	233.0	13.5	.39	93-3200	98.8	3217	33.9	CI.	5.45	None.	I...	N.	1 1/2	45	1 1/2	45	LB-ch...	3/4	R...	CI.	3.74	2065
Buick.....	35-50	8-2 1/2 x 4 1/4	RFR.	5	28.2	235.3	16.4	.37	88-3200	92.8	3477	43.8	CI.	5.25	None.	I...	N.	1 1/2	45	1 1/2	45	GE-ge...	3/4	R...	CI.	3.95	2265
Buick.....	35-60	8-3 1/2 x 4 1/4	RFR.	5	30.6	278.1	15.5	.36	100-3200	89.0	3257	43.0	CI.	5.25	None.	I...	N.	1 1/2	45	1 1/2	45	GE-ge...	3/4	R...	CI.	4.58	2470
Buick.....	35-90	8-3 1/2 x 5	RFR.	5	35.1	344.8	13.6	.34	116-3200	83.2	2982	40.4	CI.	4.95	None.	I...	N.	1 1/2	45	1 1/2	45	GE-ge...	3/4	R...	CI.	5.50	2670
Cadillac.....	355-D	V8-3 1/2 x 4 1/4	RFR.	5	36.4	353.0	*13.3	.37	130-3400	85.8	3128	36.2	CI.	6.25	5.75	L...	N.	1 1/2	30	1 1/2	45	M-ch...	7/8	P...	Al.	3.46	2795
Cadillac.....	370-D	V12-3 1/2 x 4	RFR.	5	46.9	368.0	15.6	.41	150-3600	89.7	3173	38.0	CI.	6.00	5.65	I...	N.	1 1/2	45	1 1/2	45	M-ch...	7/8	P...	Al.	3.05	2400
Cadillac.....	452-D	V16-3 1/2 x 4	RFR.	5	57.5	452.0		.41	185-3800	85.3	3067		CI.	6.00	5.65	I...	N.	1 1/2	45	1 1/2	45	M-ch...	7/8	P...	Al.	3.07	2535
Chevrolet.....	Master	6-3 1/2 x 4	RFR.	5	26.3	206.8	14.9	.39	80-3300	93.0	3020	38.5	CI.	5.60	None.	I...	N.	1 1/2	30	1 1/2	30	Va-ge...	1	R...	CI.	4.37	2200
Chevrolet.....	Std.	6-3 1/2 x 4	RFR.	5	26.3	206.8		.36	74-3200	88.6	3082		CI.	5.45	None.	I...	N.	1 1/2	45	1 1/2	45	Va-ge...	1	R...	CI.	4.37	2135
Chrysler.....	Airstream 6	6-3 1/2 x 4 1/2	Flo.	2	27.3	241.5	12.5	.39	93-3400	90.0	3065	32.4	CI.	6.00	None.	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		3550
Chrysler.....	Airstream 8	8-3 1/2 x 4 1/2	Flo.	2	33.8	273.8	11.7	.38	105-3400	89.5	2870	30.6	CI.	6.20	None.	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		3340
Chrysler.....	Airflow 8	8-3 1/2 x 4 1/2	Flo.	2	33.8	323.5	11.8	.36	115-3400	82.9	2895	33.8	CI.	6.20	None.	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2765
Chrysler.....	Airflow Imp. 8	8-3 1/2 x 4 1/2	Flo.	2	33.8	323.5	12.4	.40	130-3400	93.7	2941	30.8	Al.	6.50	7.45	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2765
Chrysler.....	Airflow I. C. 8	8-3 1/2 x 5	Flo.	2	39.2	384.8		.39	150-3200	96.4	2941		Al.	6.50	7.45	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2665
Chrysler.....	Airflow I. C. 8	8-3 1/2 x 4 1/2	Flo.	2	33.8	323.5		.40	130-3400	93.7	2895		Al.	6.50	7.45	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2765
De Soto.....	Airstream 6	6-3 1/2 x 4 1/2	Flo.	2	27.3	241.5	12.4	.38	91-3400	87.9	2890	32.9	CI.	6.00	None.	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2550
De Soto.....	Airflow 6	6-3 1/2 x 4 1/2	Flo.	2	27.3	241.5	14.0	.41	100-3400	96.5	3009	33.9	Al.	6.50	7.00	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Al.		2550
Dodge.....	6	6-3 1/2 x 4 1/2	Flo.	2	25.3	217.8	13.1	.38	85-3600	86.0	3102	33.6	CI.	6.50	None.	L...	Y.	1 1/2	45	1 1/2	45	-ch...	1 1/2	Flo.	Als.		2625
Duesenberg.....	J	8-3 1/2 x 4 1/2	RFR.	5	45.0	419.7		.63	320-4200	144.0	2460		CI.	5.20	None.	Ob.		1 1/2	30	1 1/2	30	LB-ch...	1 1/2	Flo.	Al.		3320
Ford.....	V8	8-3 1/2 x 3 1/2	RFR.	3	30.0	221.0		.41	90-3800	85.0	3090		Al.	6.30	None.	L...	Y.	1 1/2	45	1 1/2	45	-ge...	3/4	R...	Al.		2375
Graham.....	Std. 6-74	6-3 1/2 x 4	RFR.	3	21.6	169.6		.35	60-3500	80.2	3225		CI.	5.80	None.	L...	N.	1 1/2	30	1 1/2	30	LB-ch...	3/4	R...	Als.		2335
Graham.....	Spec. 6-73	6-3 1/2 x 4 1/2	RFR.	4	25.3	224.0		.38	85-3400	88.5	3045		Al.	6.50	None.	L...	N.	1 1/2	30	1 1/2	45	LB-ch...	3/4	R...	Als.		2550
Graham.....	8-72	8-3 1/2 x 4	RFR.	4	31.2	245.4		.39	95-3400	90.4	3113		Al.	6.70	None.	L...	N.	1 1/2	45	1 1/2	45	LB-ch...	3/4	R...	Als.		2265
Graham.....	Sup. 8-75	8-3 1/2 x 4	RFR.	4	33.8	265.4		.53	140-4000	104.8	2959		Al.	6.70	None.	L...	N.	1 1/2	45	1 1/2	45	LB-ch...	3/4	R...	Als.		2670
Hudson.....	Big Six	6-3 1/2 x 5	RFR.	3	21.6	212.0		.44	93-3800	91.4	3074		CA	6.25		L...		1 1/2	45	1 1/2	45	GE-ge...	3/4	Flo.	Al.	2.62	3165
Hudson Sp., Del. & Cus.	8	8-3 1/2 x 4 1/2	RFR.	3	28.8	254.4		.44	113-3800	92.8	3020		CA	6.00	7.00	L...		1 1/2	45	1 1/2	45	GE-ge...	3/4	Flo.	Al.	2.62	2850
Hupmobile.....	518	6-3 1/2 x 4 1/2	RFR.	4	29.4	245.3		.41	101-3600	90.8	3328		CI.	5.75	6.20	L...	N.	1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.	3.94	2550
Hupmobile.....	521	6-3 1/2 x 4 1/2	RFR.	4	29.4	245.3	13.6	.41	101-3600	90.8	3244	32.9	CI.	5.75	6.20	L...	N.	1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.	3.94	2550
Hupmobile.....	527	8-3 1/2 x 4 1/2	RFR.	4	32.5	303.2	12.2	.40	120-3500	89.8	3084	30.8	CI.	5.80		L...	N.	1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.		2770
La Fayette.....	3510	6-3 1/2 x 4 1/2	RFR.	4	25.3	217.8	13.9	.34	75-3200	85.3	3534	40.4	CI.	5.54	5.73	L...	N.	1 1/2	45	1 1/2	45	O-ch...	7/8	Flo.	Al.	3.75	2335
La Salle.....		8-3 1/2 x 4 1/2	RFR.	6	28.8	240.3	16.6	.40	95-3700	84.8	3256	42.0	CI.	6.50	5.75	L...	N.	1 1/2	30	1 1/2	30	W-ch...	7/8	P...	Al.	3.04	2620
Lincoln.....	V12-136-145	V12-3 1/2 x 4 1/2	RFR.	5	46.8	414.0		.36	150-3400	84.4	3027		Al.	5.58	None.	L...	Y.	1 1/2	45	1 1/2	45	M-ch...	7/8	P...	Al.		2550
Nash.....	Advanced Six	6-3 1/2 x 4 1/2	RFR.	5	27.3	234.8	15.5	.38	88-3200	92.8	3234	41.3	CI.	5.25		I...	N.	1 1/2	45	1 1/2	45	-ch...	7/8	Flo.	Als.	3.16	2335
Nash.....	Adv. & Amb. 8	8-3 1/2 x 4 1/2	RFR.	5	31.2	260.8	14.4	.38	100-3400	89.5	2989	37.5	CI.	5.25		I...	N.	1 1/2	45	1 1/2	45	-ch...	7/8	Flo.	Als.	3.48	2410
Oldsmobile.....	F-35	6-3 1/2 x 4 1/2	RFR.	3	26.3	213.3	15.4	.42	90-3400	97.5	3275	36.5	CI.	6.00	None.	L...	N.	1 1/2	30	1 1/2	30	W-ch...	1 1/2	P...	CI.	3.90	2340
Oldsmobile.....	L-35	8-3 1/2 x 4 1/2	RFR.	3	28.8	240.3	14.6	.45	100-3400	98.0	3080	35.3	CI.	6.20	None.	L...	N.	1 1/2	30	1 1/2	30	W-ch...	1 1/2	P...	CI.	4.04	2410
Packard.....	120	8-3 1/2 x 3 1/2	RFR.	3	33.8	257.2		.43	110-3850	85.0				6.50	7.00	L...		1 1/2	30	1 1/2	45	M-ch...	3/4	Flo.	Als.	3.28	2490
Packard.....	8	8-3 1/2 x 5	RFR.	3	32.5	320.0	14.9	.41	130-3200	100.5	3189	36.8	Al.	6.50	6.00	L...		1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.		2665
Packard.....	Super 8	8-3 1/2 x 5	RFR.	3	39.2	384.8	12.9	.39	150-3200	96.3	3000	33.2	Al.	6.30	6.00	L...		1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.		2665
Packard.....	Twelve	12-3 1/2 x 4 1/4	RFR.		56.7	473.0	12.0	.37	175-3200	91.5	3157	32.6	Al.	6.40	6.00	H...		1 1/2	45	1 1/2	45	M-ch...	3/4	Flo.	Als.		2265
Pierce-Arrow.....	845	8-3 1/2 x 5	RFR.	6	39.2	385.0	12.9	.36	140-3400	84.8	2876	35.5	CI.	5.50	None.	L...	N.	1 1/2	45	1 1/2	45	W-ch...	3/4	R...	Als.		2835
Pierce-Arrow.....	1245-1255	V12-3 1/2 x 4	RFR.	6	58.8	4																					

SPECIFICATIONS

CAR POWER PLANTS

RINGS		No. and Width Compression Oil	Crankshaft Counterbalanced Vibration Damper	No. of Main Bearings Connecting Rod—Lower Bearing Material	Crankpin Diameter (Ins.)	Crankpin Length (Ins.)	OIL PRES- SURE TO				Oil Cleaner Make	Crankcase Ventilator	Air Cleaner Make	Engine Temperature Control	Fuel Feed (Make and Type)	CARBU- RETOR			ELECTRICAL SYSTEM								MAKE AND MODEL					
No.	Width						Main Bearing	Connecting Rods	Camshaft	Wrist Pins						Timing Drive	Make	Type	Size (Ins.)	Ignition Make	Spark Control	Make	Size	Make	Type Drive	Air Cooled		Make	Type Drive	Make	Capacity (Amp. Hours)	
2-1/8	1-1/8	N	Y	4 BS...	2 1/4	1 1/4	Y	Y	Y	N	Pur.	Y	AC.	Th.	Ste-Mp.	Car.	SD.	1 1/4	A...	AC...	Cha.	14mm.	A...	be.	...	A...	In...	USL.	90	Auburn	653	
2-1/8	1-1/8	N	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	N	Pur.	Y	AC.	Th.	Ste-Mp.	Str.	DD.	1	A...	AC...	Cha.	14mm.	A...	be.	...	A...	In...	USL.	105	Auburn	851	
2-1/8	1-1/8	N	N	2	1 1/4	1 1/4	N	Y	Y	N	No.	Y	No.	No.	G...	Til.	...	A...	...	...	...	A...	...	...	...	A...	In...	USL.	43	Austin	...
2-1/8	2-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1	DR.	SCV.	AC.	18mm.	DR.	be.	No.	DR.	DM.	Del.	100	Buick	35-40	
2-1/8	2-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	AC.	Y	AC.	Th.	AC-Mp.	Mar.	DU.	1 1/4	DR.	SA.	AC.	18mm.	DR.	ge.	No.	DR.	DM.	Del.	100	Buick	35-50	
2-1/8	2-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	AC.	Y	AC.	Th.	AC-Mp.	Mar.	DU.	1 1/4	DR.	SA.	AC.	18mm.	DR.	ge.	No.	DR.	DM.	Del.	120	Buick	35-60	
2-1/8	2-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	AC.	Y	AC.	Th.	AC-Mp.	Mar.	DU.	1 1/4	DR.	SA.	AC.	18mm.	DR.	ge.	No.	DR.	DM.	Del.	135	Buick	35-90	
3-1/8	1-1/8	Y	N	3 BS...	2 1/4	2 1/4	Y	Y	Y	Y	No.	Y	AC.	Au.	AC-Mp.	Det.	SU.	2	DR.	SA.	AC.	18mm.	DR.	ch.	Yes.	DR.	DM.	Del.	130	Cadillac	355-D	
3-1/8	1-1/8	Y	Y	4 BS...	2 1/4	2 1/4	Y	Y	Y	Y	Cu.	Y	AC.	Au.	AC-Mp.	Det.	2U.	1 1/4	DR.	SA.	AC.	18mm.	DR.	ch.	Yes.	DR.	DM.	Del.	160	Cadillac	370-D	
3-1/8	1-1/8	Y	Y	5 BP...	2 1/4	2 1/4	Y	Y	Y	Y	No.	Y	AC.	Au.	AC-Mp.	Car.	SD.	1 1/4	DR.	SCV.	AC.	18mm.	DR.	ch.	Yes.	DR.	DM.	Del.	190	Cadillac	452-D	
2-1/8	1-1/8	Y	N	3 BS...	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Car.	SD.	1 1/4	DR.	SCV.	AC.	14mm.	DR.	be.	No.	DR.	In...	Del.	90	Chevrolet	Master	
2-1/8	2-1/8	Y	Y	4 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	B&B.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	119	Chrysler	Airstream 6	
2-1/8	2-1/8	Y	Y	5 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	119	Chrysler	Airstream 8	
2-1/8	2-1/8	Y	Y	5 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	136	Chrysler	Airflow 8	
2-1/8	2-1/8	Y	Y	5 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	AC.	...	14mm.	DR.	be.	Yes.	DR.	DM.	Wil.	136	Chrysler	Airflow Imp. 8	
2-1/8	2-1/8	Y	Y	9 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	AC.	...	14mm.	DR.	be.	...	DR.	DM.	Wil.	170	Chrysler	Airflow I. C. 8	
2-1/8	2-1/8	Y	Y	5 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	AC.	...	14mm.	DR.	be.	...	DR.	DM.	Wil.	136	Chrysler	Airflow I. C. 8	
2-1/8	2-1/8	Y	Y	4 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	B&B.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	119	De Soto	Airstream 6	
2-1/8	2-1/8	Y	Y	4 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	B&B.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	119	De Soto	Airflow 6	
2-1/8	2-1/8	Y	Y	4 B...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	90	Dodge	...	
3-1/8	1-1/8	Y	Y	5	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	...	...	DR.	SC.	...	18mm.	DR.	...	...	DR.	...	Exi.	160	Duesenberg	J
2-1/8	1-1/8	Y	N	3 CLS.	2	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1	Own	ACV.	Cha.	18mm.	Own	be.	...	Own	In...	Own.	96	Ford	V8	
2-1/8	1-1/8	Y	N	4	1 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	DR.	AC.	Cha.	18mm.	DR.	be.	...	DR.	DM.	Wil.	86	Graham	Std 6-74	
2-1/8	1-1/8	N	Y	7 BS...	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	DR.	AC.	Cha.	18mm.	DR.	be.	Yes.	DR.	DM.	Wil.	84	Graham	Spec 6-73	
2-1/8	1-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1	DR.	ACV.	Cha.	18mm.	DR.	be.	Yes.	DR.	DM.	Wil.	100	Graham	8-72	
2-1/8	1-1/8	Y	Y	5 BS...	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1	DR.	ACV.	Cha.	18mm.	DR.	be.	Yes.	DR.	DM.	Wil.	100	Graham	Sup 8-75	
2-1/8	2-1/8	Y	Y	3 BS...	1 1/4	1 1/4	N	N	N	N	Y	No.	Y	AC.	Th.	AC-Mp.	Car.	SD.	1 1/4	A...	AC.	Cha.	14mm.	A...	be.	Yes.	A...	In...	Nat.	105	Hudson	Big Six
2-1/8	2-1/8	Y	Y	5 BS...	1 1/4	1 1/4	N	N	N	N	Y	...	Y	AC.	Th.	AC-Mp.	Car.	SD.	1 1/4	A...	AC.	Cha.	14mm.	A...	be.	Yes.	A...	In...	Exi.	125	Hudson Sp, Del & Cus	8
2-1/8	2-1/8	Y	Y	4 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	SA.	...	18mm.	A...	be.	Yes.	A...	In...	Wil.	110	Hupmobile	518	
2-1/8	2-1/8	Y	Y	4 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	...	...	18mm.	A...	be.	Yes.	A...	In...	Wil.	113	Hupmobile	521
2-1/8	2-1/8	Y	Y	5 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	Str.	DD.	1 1/4	A...	...	...	18mm.	A...	be.	Yes.	A...	In...	Wil.	121	Hupmobile	527
2-1/8	2-1/8	Y	Y	7 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	B&S	Y	AC.	Th.	AC-Mp.	Mar.	SD.	1 1/4	A...	AC.	...	18mm.	A...	be.	...	A...	In...	Glo.	110	La Fayette	3510	
2-1/8	1-1/8	Y	Y	5 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	...	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	SA.	AC.	18mm.	DR.	be.	Yes.	DR.	DM.	Del.	130	La Salle	...	
2-1/8	2-1/8	Y	Y	4 CLS.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	A...	AC.	Cha.	18mm.	A...	ch.	Yes.	A...	In...	Exi.	147	Lincoln	V12-136-145	
2-1/8	1-1/8	Y	Y	7 BSB.	2	1 1/4	Y	Y	Y	Y	B&S	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	A...	AC.	AC.	14mm.	A...	be.	Yes.	A...	In...	USL.	115	Nash	Advanced Six	
2-1/8	1-1/8	N	Y	9	2	1 1/4	Y	Y	Y	Y	B&S	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	A...	AC.	AC.	14mm.	A...	be.	Yes.	A...	In...	USL.	133	Nash	Adv & Amb 8	
2-1/8	1-1/8	Y	Y	4 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	SD.	1 1/4	DR.	AC.	AC.	18mm.	DR.	be.	Yes.	DR.	DM.	Del.	100	Oldsmobile	F-35	
2-1/8	1-1/8	Y	Y	5 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	No.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1	DR.	AC.	AC.	18mm.	DR.	be.	Yes.	DR.	DM.	Del.	114	Oldsmobile	L-35	
2-1/8	1-1/8	Y	Y	9 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	...	1	A...	AC.	Cha.	14mm.	A...	be.	...	A...	In...	...	114	Packard	120
3-1/8	1-1/8	Y	Y	9 CLS.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Au.	AC-Mp.	Str.	DD.	...	NE.	AC.	Cha.	14mm.	Dy.	ch.	...	Dy.	In...	...	144	Packard	8	
3-1/8	1-1/8	Y	Y	9 CLS.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Au.	AC-Mp.	Str.	DD.	...	NE.	AC.	Cha.	14mm.	Dy.	ch.	...	Dy.	In...	...	144	Packard	Super 8	
3-1/8	1-1/8	Y	Y	4 CLS.	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Au.	AC-Mp.	Str.	DD.	...	A...	AC.	Cha.	14mm.	Dy.	be.	...	Dy.	In...	...	144	Packard	Twelve	
3-1/8	1-1/8	Y	Y	9 BS...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	AC.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	SA.	...	14mm.	Dy.	be.	Yes.	Dy.	In...	Wil.	140	Pierce-Arrow	845	
3-1/8	1-1/8	Y	Y	7 BS...	2 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Ste.	Th.	AC-Mp.	Str.	DD.	1 1/4	DR.	SA.	...	14mm.	Dy.	be.	Yes.	Dy.	In...	Wil.	160	Pierce-Arrow	1245-1255	
2-1/8	2-1/8	Y	Y	BSB.	1 1/4	1 1/4	Y	Y	Y	Y	Pur.	Y	Bur.	Th.	AC-Mp.	B&B.	SD.	1 1/4	A...	AV.	...	14mm.	A...	be.	Yes.	A...	DM.	Wil.	86	Plymouth	Six & De Luxe	
2-1/8	1-1/8	Y	Y	4 BSB.	2 1/4	1 1/4	Y	Y	Y	Y	N.	Y	AC.	Th.	AC-Mp.	Car.	SD.	1 1/4	DR.	AV.	AC.	14mm.	DR.</									

AMERICAN PASSENGER

MAKE AND MODEL	F.O.B. Price 5-pass. 4-door Sedan	Curb Weight 5 pass. 4 door Sedan (Lbs.)	Wheelbase (Ins.)	TIRES AND WHEELS				SPRINGING												Weight Dis. 5 Pass. 4 Door Sedan		Chassis Stabilizer Location
				Tire Size (Ins.)	Recommended Pressure (Lbs.)	Rim Width (Ins.)	Wheels Make	Front				Rear				Front	Rear					
								Suspension Type	Type	Rate (Approx.) (Lb. ins.)	Period (Approx.) (Cycles per min.)	Spring Features	Type	Rate (Approx.) (Lb. ins.)	Period (Approx.) (Cycles per min.)			Spring Features				
Auburn	653	795	3287	120	5.50/17	35	3 1/4	Mot.	C.	1/2 E.	220	116	B, Ta.	1/2 E.	135	92	B, Ta.	1594	1900	Rear..		
Auburn	851	1045	3607	127	6.50/16	28	4 1/2	Mot.	C.	1/2 E.	220	112	B, Ta.	1/2 E.	147	92	B, Ta.	1765	2060	Rear..		
Austin		345	1120	75	3.75/18					Tr.				1/4 E.								
Buick	35-40	895	3360	117	6.25/16	26	4 1/4	Mot.	I.	Coil.	90	70	In, Co.	1/2 E.	120	90	B, Ho.	1570	1790	Rear..		
Buick	35-50	1190	4085	119	7.00/16	26	4 1/4	Mot.	I.	Coil.	110	70	In, Co.	1/2 E.	135	87	B, Ho.	1980	2105	Rear..		
Buick	35-60	1425	4545	128	7.50/16	24	5	Mot.	I.	Coil.	125	70	In, Co.	1/2 E.	145	84	B, Ho.	2180	2365	Rear..		
Buick	35-90	1945	4985	136	7.50/16	28	5	Mot.	I.	Coil.	140	70	In, Co.	1/2 E.	155	82	B, Ho.	2430	2545	Rear..		
Cadillac	355-D	2445*	4915*	128-36-46	7.00/17	35	4 1/4	K-H.	I.	Heli.	117	n.a.	In, Co.	1/2 E.	150	n.a.	B, Th, Ta.	2330	2585	Rear..		
Cadillac	370-D	3995	5890	146	7.50/17	35	4 3/8	K-H.	I.	Heli.	143	n.a.	In, Co.	1/2 E.	183	n.a.	B, Th, Ta.	2785	3105	Rear..		
Cadillac	452-D	6750	n.a.	154	7.50/17	35	4 3/8	K-H.	I.	Heli.	157	n.a.	In, Co.	1/2 E.	194	n.a.	B, Th, Ta.	n.a.	n.a.			
Chevrolet	Std.	550	2793	107	5.25/17	32	3	Own.	C.	1/2 E.	315	130	None.	1/2 E.	117	70	None.	1301	1492	None..		
Chevrolet	Master	640	3245	113	5.50/17	28	3 3/8	Own.	C.	1/2 E.	120	92	Dub.	1/2 E.	130	88	B.	1539	1706	None..		
Chrysler	Airstream 6	860	3250	118	6.25/16	28	4 1/4	I.	Coil.	97	64	In, Co.	1/2 E.	105	68	B, Ta.	1640	1610	n.a..			
Chrysler	Airstream 8	975	3450	121	6.50/16	28	4 1/2	I.	Coil.	112	66	In, Co.	1/2 E.	110	68	B, Ta.	1770	1680	n.a..			
Chrysler	Airflow 8	1245	4150	123	7.00/16	28	5	C.	1/2 E.	123	80	B, Th, Ta.	1/2 E.	123	80	B, Ta.	2220	1930	Front..			
Chrysler	Airflow Imp. 8	1475	4320	128	7.50/16	28	5 1/4	C.	1/2 E.	133	78	B, Th, Ta.	1/2 E.	128	80	B, Ta.	2280	2040	Front..			
Chrysler	Airflow I. C. 8	2345	n.a.	137 1/2	7.50/17	28	5 1/4	C.	1/2 E.	155	n.a.	B, Th, Ta.	1/2 E.	128	n.a.	B, Ta.	n.a.	n.a.	Front..			
Chrysler	Airflow I. C. 8	5000	5850	146 1/2	7.50/16	28	5 1/4	C.	1/2 E.	235	n.a.	B, Oil.	1/2 E.	145	n.a.	B, Oil.	3050	2800	Rear..			
De Soto	Airstream 6	795	3200	116	6.25/16	28	4 1/4	I.	Coil.	97	64	In, Co.	1/2 E.	105	68	B, Ta.	1610	1590	n.a..			
De Soto	Airflow 6	1015	3680	115 1/2	6.50/16	28	4 1/2	C.	1/2 E.	118	80	B, Th, Ta.	1/2 E.	118	80	B, Ta.	1980	1700	Front..			
Dodge	Six	735	3070	116	6.00/16	28	4 1/4	C.	1/2 E.	115	92	Th, Ta.	1/2 E.	115	90	Ta.	1530	1540	Front..			
Duesenberg	J			142 1/2-153 1/2	7.00/19"			C.	1/2 E.				1/2 E.									
Ford	8	665		112	6.00/16	30		Own.		Tr.	290	95	Ta.	Tr.	190	87	Ta.	50%	50%	None..		
Graham	Std. 6-74	635	2799	111	5.25/17			K-H.	C.	1/2 E.	152	100	Ta.	1/2 E.	120	90	Ta.	1294	1505	None..		
Graham	Spec. 6-73	845	3430	116	6.00/17	28		K-H.	C.	1/2 E.	185	100	Th, Ta.	1/2 E.	135	90	Ta.	1558	1872	None..		
Graham	8-72	975	3705	123	6.50/16	28		K-H.	C.	1/2 E.	195	100	Th, Ta.	1/2 E.	137	90	Ta.	1683	2022	None..		
Graham	Super 8-75	1145	3820	123	7.00/16	28		K-H.	C.	1/2 E.	195	100	Th, Ta.	1/2 E.	137	90	Ta.	1735	2085	None..		
Hudson	Big 6	770	3010	116	6.00/16	22 1/2		Mot.	C.	1/2 E.	235	122	B.	1/2 E.	160	81	B, Spl.	1335	1675	Rear..		
Hudson	Spec., De L. & Cus. 8		3160*	117-124	6.50/16	22 1/2		Mot.	C.	1/2 E.	235	115	B.	1/2 E.	160	76	B, Spl.	1535 1/2	1625 1/2	None..		
Hupmobile	518	795	3077	118	6.00/18	24 1/2	4 1/4	Budd.	C.	1/2 E.	165	94	Ta.	1/2 E.	120	83	Ta.	1540	1537	None..		
Hupmobile	521	1095	3600	121	6.50/16	22 1/2	4 1/2	C.	1/2 E.	186	93	Ta.	1/2 E.	122	77	Ta.	1790	1820	Rear..			
Hupmobile	527	1395	3985	127 1/2	7.00/16	22 1/2	5	C.	1/2 E.	200	90	Ta.	1/2 E.	122	73	Ta.	1960	2025	Rear..			
La Fayette	3510	670	3150	113	6.00/16	30	4 1/4	Budd.	C.	1/2 E.	150	92	B, Th, Si.	1/2 E.	120	85	B, Th, Si.	1525	1625	None..		
La Salle	50	1545	4095	119	7.00/16	25	4 1/2	Mot.	I.	Heli.	n.a.	n.a.	In, Co.	1/2 E.	n.a.	n.a.	B, Th, Ta.	1825	2265	Rear..		
Lincoln	V12-136		4300	136	7.50/17	40	40	Own.	C.	1/2 E.				1/2 E.						Rear..		
Lincoln	V12-145		5500	145	7.50/17	40	40	Own.	C.	1/2 E.				1/2 E.						Rear..		
Nash	Advanced 6	945	3630	120	6.25/16	30	4 1/4	Budd.	C.	1/2 E.	130	85	B, Th, Si.	1/2 E.	130	85	B, Th, Si.	1800	1830	None..		
Nash	Advanced 8	1165	3800	125	6.50/16	28	4 1/4	Budd.	C.	1/2 E.	130	82	B, Th, Si.	1/2 E.	130	82	B, Th, Si.	1900	1900	None..		
Oldsmobile	F-35	790	3407	115	6.25/16	25 1/2	4 1/4	K-H.	I.	Coil.	87	75	In, Co.	1/2 E.	125	88	B, Ru.	1577	1830	Rear..		
Oldsmobile	L-35	940	3648	121	7.00/16	25 1/2	4 1/2	K-H.	I.	Coil.	99	n.a.	In, Co.	1/2 E.	135	n.a.	B, Ru.	1720	1928			
Packard	120	1060	3580	120	7.00/16	23 1/2		I.	Coil.	90	n.a.	In, Co.	1/2 E.	120	n.a.	B, Th, Ta.	1715	1865	Rear..			
Packard	8	2385*	5000*	127-34-39	7.00/17	35		C.	1/2 E.	255	n.a.	B, Th, Ta.	1/2 E.	145	n.a.	B, Ta.	2300	2700	None..			
Packard	Super 8	2990*	5280	132-39-44	7.00/17	35		C.	1/2 E.	275	n.a.	B, Th, Ta.	1/2 E.	145	n.a.	B, Ta.	2540	2740	None..			
Packard	Twelve	3960*	6030	139-144	7.50/17	35		C.	1/2 E.	275	n.a.	B, Th, Ta.	1/2 E.	155	n.a.	B, Ta.	2910	3120	None..			
Pierce-Arrow	845	2895*	4965*	139-144	7.00/17	40	4 3/8	K-H.	C.	1/2 E.	320		B, Ta, Th.	1/2 E.	130		B, Ta, Th.	2457	2797	None..		
Pierce-Arrow	1245-1255	3295*	5235*	139-44-47	7.50/17	40	4 3/8	K-H.	C.	1/2 E.	360		B, Ta, Th.	1/2 E.	130		B, Ta, Th.	2690	2833	None..		
Plymouth	Six	660	2900	113	6.00/16	28	4	C.	1/2 E.	115	92	Th, Ta.	1/2 E.	115	90	Ta.	1470	1530	Front..			
Pontiac	Std. 6	665	3340	112				K-H.	C.	1/2 E.	210	115	B, Ta.	1/2 E.	117	90	B, Ta, Ru.	1594	1746	Front..		
Pontiac	De L. 6	765	3400	112	6.00/16	25 1/2	4 1/4	K-H.	I.	Coil.	125	80	Dub.	1/2 E.	117	80	B, Ta, Ru.	1659	1741	Rear..		
Pontiac	8	830	3530	116 1/2	6.50/16	25 1/2	4 1/2	K-H.	I.	Coil.	125	80	Dub.	1/2 E.	117	80	B, Ta, Ru.	1727	1823	Rear..		
Reo	6A	845	3300	115	6.25/16	28	4 1/4	Mot.	C.	1/2 E.	280	120	B, Th.	1/2 E.	120	88	B, Th.	1680	1620	None..		
Reo	S7	985	3635	118	6.50/16	22 1/2	4 1/2	Mot.	C.	1/2 E.	300	120	B, Th.	1/2 E.	133	80	B, Th.	1700	1935	None..		
Studebaker	Dict. 6	720	3100	167 1/2	6.00/16	30	4	Budd.	C.	1/2 E.	250		B, Th.	1/2 E.	122		B.	1420	1763			
Studebaker	Com. 8	955	3640	173 1/2	6.50/16	30	4 1/4	Budd.	I.	Tr.	225		B, Th.	1/2 E.	122		B.	1524	1765			
Studebaker	Pres. 8	1330	3700	177 1/2	7.00/16	30	4 1/2	Budd.	I.	Tr.	250		B, Th.	1/2 E.	122		B.	1877	2162			
Stutz	SV-16	2780*		134 1/2-145	7.00/18"	40 1/2	4 1/2	K-H*	C.	1/2 E.				1/2 E.								
Stutz	DV-32	3095*	5320*	134 1/2-145	7.00/18"	40 1/2	4 1/2	K-H*	C.	1/2 E.				1/2 E.								
Terraplane	Spec. & De L.	655*	2950	112	6.00/16	22 1/2		Mot.	C.	1/2 E.	210	115	B.	1/2 E.	160	76	B, Spl.	1350	1600	Rear..		
Willys	77		2156	100	5.00/17	30	3	K-H.	C.	1/2 E.	300	145	Th.	1/2 E.	105	88	Th.	1074	1147	None..		

ABBREVIATIONS:

*—Measured at Spring
 †—For 117 W. B.
 ‡—Overall Length
 §—Others Also
 †—Front Only
 1/2 E.—1/2 Elliptic
 1/4 E.—Semi-elliptic
 *—Cadillac 355-D series 10 5p. Sedan

Packard 8—127 in. Wheelbase
 Packard Super 8—132 in. Wheelbase
 Packard 12—139 in. Wheelbase
 Pierce-Arrow 845—138 in. Wheelbase
 Pierce-Arrow 1245—138 in. Wheelbase
 Stutz—134 1/2 in. Wheelbase
 Terraplane—Special Six
 B—Spring Boots or Covers
 Ben—Bendix
 BB—Ball Bearing

C—Conventional
 CI—Cast Iron
 CIL—Cast Iron Liner
 Co—Coil
 Det—Detroit
 Dub—Dubonnet Suspension
 Enc—Enclosed
 ExDr—External Driveshaft
 f—Fabric
 F—Free Wheeling

Faf—Fafnir
 FF—Full Floating
 Heli—Helical
 Ho—Hooker Points
 IFM—Internal Four Wheel Mechanical
 IH—Internal Hydraulic
 Ill—Illinois
 IM—Internal Mechanical
 In—Independent
 K-H—Kelsey-Hayes

CAR CHASSIS

BRAKES					FRONT AXLE					CLUTCH			GEARSET		REAR AXLE					SHACKLES		MAKE AND MODEL		
Make	Type	Service			Hand Location and Operation	Caster (Deg.)	Camber (Deg.)	Toe-in (Ins.)	King Pin Inclination (Deg.)	Type and Make	Vibration Insulator	Operation	No. of Speeds Location and Make	Free Wheeling Synchronesh, etc.	Universal Type and Make	Type and Make	Final Drive	Torque Medium	Gear Ratio	Make	Type			
		Power Operated	Drum Material	Drum Diameter																				
Ben. Ben.	IH. IH.	No. No.	PS. CIL.	12 12	MRS. MRS.	3 1/4-4 2-3	1 1/2	1/8-3/8	7 1/2	P-Long. P-Long.	Sp. Sp.	Man. Man.	3U-WG. 3U-Det.	S. Se2	Nb-Mec. Nb-Mec.	1/2-Col. 1/2-Col.	SB. SB.	Sp. Sp.	4.44 4.50	Own. Own.	RB. RB.	Auburn. Auburn.	653 851	
Mid.	IM.	No.	PS.		IFM.					P.		Man.	3U-WG.	C.	f-Spi.	1/2-Sal.		tt.		Own.	M.	Austin.		
Ben. Own. Own. Own.	IM. IM. IM. IM.	No. Yes. Yes. Yes.	PS. CIL. CL. CL.	12 12 14 14	IFM. IFM. IFM. IFM.	2 1/4-3 1/4 1 1/2-2 1/4 1-1 1/4 1-1 1/4	1 1/2 1 1/2 1 1/2 1 1/2	1/8-3/8 1/8-3/8 1/8-3/8 1/8-3/8	4 1/2 4 1/2 4 1/2 4 1/2	P-Own. P-Own. P-Own. dp-Own.	Sp. Sp. Sp. Sp.	Man. Man. Man. Man.	3U-Own. 3U-Own. 3U-Own. 3U-Own.	S. S. S. S.	M-Spi. M-Own. M-Own. M-Own.	1/2-Own. 1/2-Own. 1/2-Own. 1/2-Own.	SB. SB. SB. SB.	tt. tt. tt. tt.	4.33 4.89 4.70 4.36	Own. Own. Own. Own.	TM. TM. TM. TM.	Buick. Buick. Buick. Buick.	35-40 35-50 35-60 35-90	
Own. Own. Own.	IM. IM. IM.	Yes. Yes. Yes.	CL. CL. CL.	15 15 15	MRS. MRS. MRS.	1 1/2 1 1/2 1 1/2	1 1	1/8-3/8 1/8-3/8 1/8-3/8	4 4 4	dp-Own. dp-Own. dp-Own.	No. No. No.	Man. Man. Man.	3U-Own. 3U-Own. 3U-Own.	S. S. S.	Nb-Mec. Nb-Mec. Nb-Mec.	1/2-Own. 1/2-Own. 1/2-Own.	SB. SB. SB.	Sp. Sp. Sp.	4.60 4.80 4.80	Own. Own. Own.	R. R. R.	Cadillac. Cadillac. Cadillac.	355-D 370-D 452-D	
Own. Own.	IM. IM.	No. No.	PS. PS.	10 12	IFM. IFM.	1 1/2 1 1/2	1 1	1/8-3/8 1/8-3/8	7 1/2 7 1/2	P-Own. P-Own.	Sp. Sp.	Man. Man.	3U-Own. 3U-Own.	C. S.	M-Own. M-Own.	1/2-Own. 1/2-Own.	SB. SB.	tt. tt.	4.11 4.11	Own. Own.	M. M.	Chevrolet. Chevrolet.	Std. Master	
Wag. Wag. Wag. Wag. Wag. Wag.	IH. IH. IH. IH. IH. IH.	No. No. No. Yes. Yes. Yes.	CIL. CIL. CIL. CIL. CIL. CIL.	10 11 13 13 13 13	ExDr. ExDr. ExDr. ExDr. ExDr. ExDr.	1 1/2-2 1/4 1 1/2-2 1/4 1-3 1-3 1-3 1-3	1 1/2 1 1/2 1 1/2 1 1/2 1 1/2	1/8 1/8 1/8 1/8 1/8 1/8	9 4 1/2 4 4	P-B&B. P-B&B. P-B&B. P-B&B. P-B&B. P-B&B.	Sp. Sp. Sp. Sp. Sp. Sp.	Man. Man. Man. Man. Man. Man.	3U-Own. 3U-Own. 3U-WG. 3U-WG. 3U-WG. 3U-WG.	S. S. S. S. S. S.	Nb-Spi. Nb-Spi. Nb-Spi. Nb-Spi. Nb-Spi. Nb-Spi.	1/2-Spi. 1/2-Spi. 1/2-Spi. 1/2-Spi. 1/2-Spi. 1/2-Spi.	SB. SB. SB. SB. SB. SB.	Sp. Sp. Sp. Sp. Sp. Sp.	4.11 3.91 4.10 4.30 4.30 4.30	RB. RB. RB. RB. RB. RB.			Chrysler. Chrysler. Chrysler. Chrysler. Chrysler. Chrysler.	Airstream 6 Airstream 8 Airflow 8 Airflow Imp. 8 Airflow I. C. 8
Wag. Wag.	IH. IH.	No. No.	CIL. CIL.	10 11	ExDr. ExDr.	1 1/2-2 1/4 1-3	1 1/2 1 1/2	1/8 1/8	9 4	P-B&B. P-B&B.	Sp. Sp.	Man. Man.	3U-Own. 3U-Own.	S. S.	Nb-Spi. Nb-Spi.	1/2-Spi. 1/2-Spi.	SB. Hyp.	Sp. Sp.	3.89 4.10	RB. RB.		De Soto. De Soto.	Airstream 6	
Wag.	IH.	No.	CI.	10	ExDr.	1-3	1 1/2	1/8	8 1/2	P-B&B.	Sp.	Man.	3U-Own.	S.	Nb-Spi.	1/2-Spi.	SB.	Sp.	4.12	PM.	RB.	Dodge.	Six	
Lock.	IH.	Yes.			ExDr.					dp-Long.	Sp.	Man.	3U-Own.	Fo.	M-Spi.	1/2-Own.		tt.		Own.	M.	Duesenberg.	J	
Own.	IM.	No.	CI.	12	IFM.	7	2	1/8	7	P-Long.	Sp.	Se.	3U-Own.	S.	M-Own.	1/2-Own.	SB.	tt.	4.11	O&S.	f.	Ford.	8	
Lock. Lock. Lock. Lock.	IH. IH. IH. IH.	No. No. No. No.	PS. PS. PS. PS.	9 11 13 13	MRS. MRS. ExDr. ExDr.	2 1/2 2 2 2	1 1 1 1	1/8 1/8 1/8 1/8	7 7 7 7	P-III. P-Long. P-Long. P-Long.	Sp. Sp. Sp. Sp.	Man. Man. Man. Man.	3U-WG. 3U-WG. 3U-WG. 3U-WG.	S. S. S. S.	Nb-Spi. Nb-Spi. Nb-Spi. Nb-Spi.	1/2-Spi. 1/2-Spi. 1/2-Spi. 1/2-Spi.	SB. SB. SB. SB.	Sp. Sp. Sp. Sp.	4.27 4.27 4.27 4.27	East. East. East. East.	R. R. R. R.	Graham. Graham. Graham. Graham.	Std. 6-74 Spec. 6-73 8-72 Super 8-75	
Ben. Ben.	IM. IM.	No. No.	PS. PS.	9	IFM. IFM.	3 1/4-3 3/4 4-4 1/4		1/8 1/8	7 7	P-Own. P-Own.	Sp. Sp.	Pow. Pow.	3U-Own. 3U-Own.	No. Va.	Nb-Spi. Nb-Spi.	1/2-Own. 1/2-Own.	SB. SB.	Sp. Sp.	4.11 4.11	PM. PM.	SU. SU.	Hudson. Hudson Spec., De L. & Cus.	Big 6 8	
Lock. Mid. Mid.	IH. IH. IH.	No. Yes. Yes.		10 12 14	MRS. IFM. IFM.	1 1/2 1 1/2 1 1/2	1 1/2 1 1/2	1/8 1/8 1/8	7 1/2 8 1/2	P-B&B. P-B&B. P-Long.	Sp. Sp. Sp.	Man. Man. Man.	3U-WG. 3U-WG. 3U-WG.	S. S. S.	Nb-Spi. Nb-U-P. Nb-U-P.	1/2-Spi. 1/2-Spi. 1/2-Spi.	SB. Hyp. Hyp.	Sp. Sp. Sp.	4.45 4.45 4.45	PM. PM. PM.	SU. SU. SU.	Hupmobile. Hupmobile. Hupmobile.	518 521 527	
Ben.	IM.	No.	PS.	11	IFM.		1 1/2	1/8	7	P-B&B.	Sp.	Man.	3U-Own.	S.F.	M.	1/2-Own.	SB.	Sp.	4.70		RM.	La Fayette.	3510	
Ben.	IH.	No.	CIL.	12	MRS.	2	1	1/8	4 1/2	P-B&B.	Sp.	Man.	3U-Own.	S.	Nb-Spi.	1/2-Own.	SB.	Sp.	4.78	Own.	TM.	La Salle.	50	
Ben. Ben.	IM. IM.	Yes. Yes.	PS. PS.	15 1/2 15 1/2	IFM. IFM.	2 2	1 1	1/8 1/8	7 1/2 7 1/2	P-Long. P-Long.	Sp. Sp.	Man. Man.	3U-Own. 3U-Own.	S.F. S.F.	M-Spi. M-Spi.	FF-Own. FF-Own.	SB. TT. TT.	4.58 4.58	Own. Own.	M. M.	Lincoln. Lincoln.	V12-136 V12-145		
Ben. Ben.	IH. IH.	No. No.	CI. CI.	11 11	MRS. MRS.	2 1/2 2 1/2				P-B&B. P-B&B.		Man. Man.	3U-Own. 3U-Own.	S. S.	Nb-Mec. Nb-Mec.	1/2-Own. 1/2-Own.	SB. SB.	Sp. Sp.	4.40 4.10		T. T.	Nash. Nash.	Advanced 6 Advanced 8	
Ben. Ben.	IH. IH.	No. No.	PS. PS.	11 1/2 12	MRS. MRS.	1 1/2-2 1/4 1 1/2-2 1/4	1 1/2-1 1 1/2-1	1/8-3/8 1/8-3/8	5 5	P-B&B. P-B&B.	Sp. Sp.	Man. Man.	3U-Own. 3U-Own.	S. S.	Nb-Mec. Nb-Mec.	1/2-Own. 1/2-Own.	SB. SB.	Sp. Sp.	4.44 4.44	PM. PM.	T. T.	Oldsmobile. Oldsmobile.	F-35 L-35	
Wag. Ben. Ben. Ben. Ben.	IH. IM. IM. IM. IM.	No. Yes. Yes. Yes.	CIL. CIL. CIL. CIL.	12 14 14 15	MRS. IFM. IFM. IFM.	2 1 1 1	1 1 1 1	1/8 1/8 1/8 1/8	1 1/2 9 9 9	P-Long. P-Long. P-Long. P-Long.	SC. Sp. Sp. Sp.	Man. Man. Man. Man.	3U-Own. 3U-Own. 3U-Own. 3U-Own.	S. S. S. S.	Nb-Spi. Nb-Spi. Nb-Spi. Nb-Spi.	1/2-Own. 1/2-Own. 1/2-Own. 1/2-Own.	Hyp. Hyp. Hyp. Hyp.	Sp. Sp. Sp. Sp.			TM. Own. Own. Own.	Packard. Packard. Packard. Packard.	120 8 Super 6 Twelve	
IM. IM.	Yes. Yes.	PS. PS.		16 16	IFM. IFM.	3/4 3/4	1 1	1/8 1/8	8 8	P-Long. P-Long.	Sp. Sp.	Man. Man.	3U-Own. 3U-WG.	S. S.	Nb-U-P. Nb-U-P.	1/2-Own. 1/2-Own.	Hyp. Hyp.	Sp. Sp.	4.23 4.21	Faf. Faf.	BB. BB.	Pierce-Arrow. Pierce-Arrow.	845 1245-1255	
Wag.	IH.	No.	CIL.	10	ExDr.	1-3	1 1/2	1/8	8 1/2	P-B&B.	Sp.	Man.	3U-Own.	S.	Nb-Spi.	1/2-Own.	SB.	Sp.	4.12	PM.	SU.	Plymouth.	Six	
Ben. Ben. Ben.	IH. IH. IH.	No. No. No.	PS. PS. PS.	12 12 12	MRS. MRS. MRS.		0 0	1/8 1/8	7 7 7	P-Own. P-Own. P-Own.	Sp. Sp. Sp.	Man. Man. Man.	3U-Own. 3U-Own. 3U-Own.	S. S. S.	M-Own. M-Own. M-Own.	1/2-Own. 1/2-Own. 1/2-Own.	SB. SB. SB.	tt. tt. tt.	4.44 4.44 4.55		TM. TM. TM.	Pontiac. Pontiac. Pontiac.	Std. 6 De L. 6	
Mid. Lock.	IH. IH.	No. No.	CIL. CIL.	11 12	ExDr. ExDr.	1 1/2 4	1 1/2 1 1/2	1/8 1/8	8 8	P-B&B. P-Own.	Sp. Sp.	Man. Man.	3U-WG. 3U-Own.		Nb-Spi. Nb-Spi.	1/2-Spi. 1/2-Own.		Sp. Sp.	4.30 4.30	PM. PM.	SU. SU.	Reo. Reo.	6A 57	
Lock. Lock. Lock.	IH. IH. IH.	No. No. No.		11 1/2 12 1/2 13 1/2	MRS. MRS. MRS.	1 1/2 1 1/2 1 1/2	1 1 1	1/8-3/8 1/8-3/8 1/8-3/8	9 1/2 9 1/2 9 1/2	P-B&B. P-B&B. P-Long.	Sp. Sp. Sp.	Man. Man. Man.	3U-WG. 3U-WG. 3U-WG.	S. S.F. S.F.	Nb-Mec. Nb-Mec. Nb-Mec.	1/2-Spi. 1/2-Own. 1/2-Own.	SB. SB. SB.	Sp. Sp. Sp.	4.55 4.45 4.73	PM. Harris Harris	SU. R. R.	Studebaker. Studebaker. Studebaker.	Dict. 6 Com. 8 Pres. 8	
Lock. Lock.	IH. IH.	Yes. Yes.	PS. PS.	16 16	ExDr. ExDr.	2 2	1 1	1/8 1/8	7 7	dp-Long. dp-Long.	Sp. Sp.	Man. Man.	3U-Mun. 3U-Mun.	S. S.	M-Mec. M-Mec.	1/2-Tim. 1/2-Tim.	Wo. Wo.	Sp. Sp.	4.75 4.50	Own. Own.	M. M.	Stutz. Stutz.	SV-16 DV-32	
Ben.	IM.	No.	PS.	9	IFM.	3 1/4-3 3/4	1-1 1/2	1/8	7	P-Own.	Sp.	Pow.	3U-Own.	I.	Nb-Spi.	1/2-Own.	SB.	Sp.	4.11	PM.	SU.	Terraplane.	Spec. & De L.	
Ben.	IM.	No.	PS.	9	IFM.	1-2	2	3/8	7 1/2	P-B&B.	Sp.	Pow.	3U-Own.		M-U-P.	1/2-Own.	SB.	Sp.	4.30	Try.	M.	Willis.	77	

M—Metal
 Man—Manual
 Mec—Mechanics
 Mid—Midland Steeldraulic
 Mot—Motor Wheel
 MRS—Mechanically Operated Rear Service
 Mun—Muncie
 n.a.—Not Available
 Nb—Needle Bearing

O—Overdrive
 O&S—O&S Bearing Co
 Oil—Oilite Inserts
 PM—Pressed Metals of America
 Pow—Power
 PS—Pressed Steel
 R—Rubber
 RB—Rubber Bushing
 Ru—Rubber and Metal
 Ru—Rubber Insulated

S—Synchronized Shift
 Sal—Salisbury
 SB—Spiral Bevel
 SC—Semi-Centrifugal
 Si—Silentite Inserts
 Sp—Springs
 Spi—Spicer
 Spl—Splayed
 Se2—Synchronized Silent Second
 SU—Silent "U"

Ta—Tapered Leaves
 Th—Thin Leaf Spring
 Tim—Timken
 TM—Threaded Metal
 Tr—Transverse
 Try—Tryon
 tt—Torque Tube
 Va—Vacuum Shift
 Wag—Wagner
 Wo—Worm

AMERICAN TRUCKS

MAKE AND MODEL	GENERAL (See Keynote)				TIRE SIZE		ENGINE										GEARSET				FUEL SYST.				ELEC-TRICAL		BRAKES				
	Chassis Price	Standard Wheelbase	Gross Weight	Chassis Wt. (Stripped)	Front	Rear	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque Lb. Ft.	A.M.P. at R.P.M.	Valve Argmt.	Camshaft Drive	MAIN BEARINGS		Governor Make	REAR AXLE		GEAR RATIOS		Fuel Feed	Ignition System	Generator Make	Clutch Type and Make	Universal Make	SERVICE					
														Diameter and Number	Length		Make	Location, Forward	Make	Gear and Type						Drive & Torque	In High	In Low	Carburetor	Location Type	Drum Material	Hand Location
A.C.F.	6920	186 222	26000	10170	B9.75/22	B10.50/22	6-3 1/2 x 5 1/2	468	4	4 322 43.3	120-2200	T-T-T-T	G-G-G-G	4-2 3/4	10 1/2	Ha	BL	U-4	Op	2F	R	7 46 38 6 Zen	V	DR	DR	P.B.L.	ds	O41A	A	CD	
Armstrong ..	8300	186 240	31000	11610	B10.50/24	B10.50/24	6-3 1/2 x 5 1/2	707	4	4 500 60.8	175-2200	T-T-T-T	H-H-H-H	4-2 3/4	14 1/2	Ha	BL	U-4	Op	2F	R	7 46 38 6 Zen	M	DR	DR	dp.Lo	ds	O41A	A	CD	
Armstrong ..	1295	186 240	31000	4850	B8.50/20	B8.50/20	6-3 1/2 x 4 1/2	248	4	3 100 27.3	78-2800	T-T-T-T	C-C-C-C	4-2 3/4	10 1/2	Mo	BL	U-4	Op	2F	R	7 46 38 6 Zen	M	DR	DR	dp.Lo	ds	O41A	A	CD	
Armstrong ..	2185	160 217	15300	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	339	4	7 225 38.4	78-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Armstrong ..	3050	146 227	23000	6600	B9.75/20	B9.75/20	6-4 x 4 1/2	339	4	7 225 38.4	78-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Armstrong ..	3725	146 227	24000	7400	B9.75/20	B9.75/20	6-4 x 4 1/2	360	4	7 225 38.4	85-2400	T-T-T-T	C-C-C-C	4-2 3/4	15 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Armstrong ..	5895	152 247	35000	9820	B10.50/24	B10.50/24	6-4 x 4 1/2	629	4	4 276 40.8	115-2200	T-T-T-T	C-C-C-C	4-2 3/4	16 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Armstrong ..	4150	148 174	35000	7100	B9.75/20	B9.75/20	6-4 x 4 1/2	428	4	3 308 45.6	103-2800	T-T-T-T	C-C-C-C	4-2 3/4	15 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Armstrong ..	4690	148 174	45000	7326	B9.75/20	B9.75/20	6-4 x 4 1/2	629	4	4 355 51.2	115-2200	T-T-T-T	C-C-C-C	4-2 3/4	15 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 02 39 2 Str	M	AL	AL	D.Fu	ds	L41HV	G	TX
Autocar.	3000	150 192	20000	6760	B8.25/20	B8.25/20	6-3 1/2 x 4 1/2	314	4	2 213 33.7	75-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-4	Op	2F	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21	
Autocar.	3400	150 192	22000	7215	B9.75/20	B9.75/20	6-3 1/2 x 4 1/2	314	4	2 213 33.7	75-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-4	Op	2F	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21	
Autocar.	3500	150 192	22000	7215	B9.75/20	B9.75/20	6-3 1/2 x 4 1/2	314	4	2 213 33.7	75-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-4	Op	2F	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21	
Autocar.	3500	150 192	22000	7215	B9.75/20	B9.75/20	6-3 1/2 x 4 1/2	314	4	2 213 33.7	75-2400	T-T-T-T	C-C-C-C	4-2 3/4	13 1/2	Mo	Fu	U-4	Op	2F	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21	
Autocar.	4150	135 177	20000	7750	B9.63/20	B9.63/20	6-4 x 4 1/2	358	5	2 240 38.4	84-2500	T-T-T-T	C-C-C-C	4-2 3/4	12 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4650	178 213	26000	8680	B9.75/20	B9.75/20	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750	178 213	26000	9284	B9.75/22	B9.75/22	6-4 x 4 1/2	404	5	1 271 43.4	94-2500	T-T-T-T	C-C-C-C	4-2 3/4	14 1/2	Mo	Fu	U-5	No	Ti	BF	R	6 16 21 39 3 Str	M	DR	DR	dp.Lo	ds	L04MDV	c	21
Autocar.	4750</																														

Corbett (3)	1146111-2 1146112-3 1146113-4 1146114-5 1146115-6 1146116-7 1146117-8 1146118-9 1146119-10	109551631833 166551631833 3600163220 3740174220 5870185220 5870185220 5870185220 5870185220 5870185220 5870185220	3400B6.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20 4200B7.50/20	10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	Day-Elder (4)	7511-1 7511-2 7511-3 7511-4 7511-5 7511-6 7511-7 7511-8 7511-9 7511-10	945135156 1195156186 1195156186 1195156186 1195156186 1195156186 1195156186 1195156186 1195156186 1195156186	3900B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20	10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	Diamond T	211A 211B 211C 211D 211E 211F 211G 211H 211I 211J	575135168 775135168 775135168 775135168 775135168 775135168 775135168 775135168 775135168 775135168	3900B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20 4100B6.00/20	10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	Differential	E-121 E-122 E-123 E-124 E-125 E-126 E-127 E-128 E-129 E-130	3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160	18100 18100 18100 18100 18100 18100 18100 18100 18100 18100	Dodge	KC KCL KCL KCL KCL KCL KCL KCL KCL KCL	Com'l Com'l Com'l Com'l Com'l Com'l Com'l Com'l Com'l Com'l	1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17 1775B5.25/17	3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160 3200160160	18100 18100 18100 18100 18100 18100 18100 18100 18100 18100	Duplex	SAC SAC SAC SAC SAC SAC SAC SAC SAC SAC	8 8 8 8 8 8 8 8 8 8	386016616 386016616 386016616 386016616 386016616 386016616 386016616 386016616 386016616 386016616	18000 18000 18000 18000 18000 18000 18000 18000 18000 18000	Federal	DM DM DM DM DM DM DM DM DM DM	1 1 1 1 1 1 1 1 1 1	975120120 975120120 975120120 975120120 975120120 975120120 975120120 975120120 975120120 975120120	3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20 3000B6.00/20	10000 10000 10000 10000 10000 10000 10000 10000 10000 10000	Ford	Commercial Commercial Commercial Commercial Commercial Commercial Commercial Commercial Commercial Commercial	1 1 1 1 1 1 1 1 1 1	3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20 3200B6.00/20	18000 18000 18000 18000 18000 18000 18000 18000 18000 18000
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(For abbreviations see page 260)

AMERICAN TRUCKS—Continued

MAKE AND MODEL	GENERAL (See Keynote)										TIRE SIZE		ENGINE										GEARSET			REAR AXLE				FUEL SVST.		ELEC-TRICAL		BRAKES					
	Tonnage Rating	Chassis Price	Standard Wheelbase	Furnished	Gross Vehicle Weight	Chassis Wt.	(Stripped)	Front		Rear	Make and Model	No. of Cylinders	Displacement	Comp. Ratio	Torque Lb., ft.	A.M.A. Rated H.P.	Max. Brake Given	Valve Argmt.	Camshaft Drive	Number and Diameter of Bearings	Length	Governor Make	Make	Location, Forward Speeds	Aux. Location and Speeds	Gear and Drive Type	Drive & Torque		In High	In Low	Carburetor Make	Ignition System Make	Generator Make	Clutch Type	Universal Make	Make Location	Service	Hand Location	Type
								Chassis	Engine																		Gear	Torque											
General Mot. T-16 1 1/2-2	16 1/2-2	620	131	157	10000	3165	P30x5	P32x6	Own 213	Own 213	6-3 1/2	213	0	122	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-18 2-3	18 2-3	675	140	164	10500	3270	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-20 3-4	20 3-4	715	142	164	11000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-22 4-5	22 4-5	755	142	164	11500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-24 5-6	24 5-6	795	142	164	12000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-26 6-7	26 6-7	835	142	164	12500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-28 7-8	28 7-8	875	142	164	13000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-30 8-9	30 8-9	915	142	164	13500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-32 9-10	32 9-10	955	142	164	14000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-34 10-11	34 10-11	995	142	164	14500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-36 11-12	36 11-12	1035	142	164	15000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-38 12-13	38 12-13	1075	142	164	15500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-40 13-14	40 13-14	1115	142	164	16000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-42 14-15	42 14-15	1155	142	164	16500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-44 15-16	44 15-16	1195	142	164	17000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-46 16-17	46 16-17	1235	142	164	17500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-48 17-18	48 17-18	1275	142	164	18000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-50 18-19	50 18-19	1315	142	164	18500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-52 19-20	52 19-20	1355	142	164	19000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-54 20-21	54 20-21	1395	142	164	19500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-56 21-22	56 21-22	1435	142	164	20000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-58 22-23	58 22-23	1475	142	164	20500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-60 23-24	60 23-24	1515	142	164	21000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-62 24-25	62 24-25	1555	142	164	21500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-64 25-26	64 25-26	1595	142	164	22000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-66 26-27	66 26-27	1635	142	164	22500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-68 27-28	68 27-28	1675	142	164	23000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-70 28-29	70 28-29	1715	142	164	23500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-72 29-30	72 29-30	1755	142	164	24000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-74 30-31	74 30-31	1795	142	164	24500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-76 31-32	76 31-32	1835	142	164	25000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-78 32-33	78 32-33	1875	142	164	25500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-80 33-34	80 33-34	1915	142	164	26000	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-82 34-35	82 34-35	1955	142	164	26500	3400	P30x5	P32x6	Own 221	Own 221	6-3 1/2	215	0	124	26	84	3500	H	O	Opt	Own	U4	No	Own	3F	5.67	41	0	Zen	DR	DR	P.Ow	Spi	LAIH	C	II			
General Mot. T-84 35-36	84 35-36	1995	142	164	27000	3400	P																																

Model	Year	Price	Engine	Transmission	Drivetrain	Options	Notes
Indiana	1935	10700	4000	4000	4000	4000	4000
International	1935	10700	4000	4000	4000	4000	4000
Kenworth	1935	10700	4000	4000	4000	4000	4000
Kielber	1935	10700	4000	4000	4000	4000	4000
La France Rep.	1935	10700	4000	4000	4000	4000	4000
Le Moon	1935	10700	4000	4000	4000	4000	4000
Mack	1935	10700	4000	4000	4000	4000	4000

(For abbreviations see page 260)

AMERICAN TRUCKS—Continued

Automotive Industries

[illegible]

For abbreviations see page 260)

Six-Wheeler:

MAKE AND MODEL	GENERAL (See Keynote)					TIRE SIZE		No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque Lb. Ft.	A.M. H.P.	Max. Brake H.P. at R.P.M.	ENGINE				GEARSET				REAR AXLE				FUEL SVST.		ELEC-TRICAL		BRAKES						
	Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W.B. Furnished	Gross Vehicle Weight	Chassis Wt. (Striped)	Front							Rear	Make and Model	No. of Cylinders	Valve Arrmt.	Camshaft Drive	MAIN BEARINGS		Make	Location, Forward Speeds	Aux. Location	Type and Gear	Drive & Torque		In High	In Low	Carburetor	Ignition Sys.	Generator, Starter Make	Clutch Type	Universals Make	Make	SERVICE	Type
																			Diameter and Number	Length					Gear Ratios	Make										
Indiana.....	12X4 1½	2650	141	10000	4360	B6 50/20	DB6 50/20	Her JXC	6-3½x4½	268½	4.176	33.8	70-2600	G	7-3½	10H	WG	U 4 2	U 4 2	W 16	48	H 5.14	54.0	8tr	MAL	AL	PBL	Spl	LAIH	G	CD					
.....	14X4 2½	3950	141	14000	5350	B7 50/20	DB7 50/20	Her WXC	6-3½x4½	268½	4.176	33.8	70-2600	G	7-3½	10H	WG	U 4 2	U 4 2	W 16	48	H 5.14	54.0	8tr	MAL	AL	PBL	Spl	LAIH	G	CD					
.....	16X4 3	4850	156	21000	7500	B8 26/20	DB8 26/20	Her WXC2	6-4½x4½	361½	4.7	285	38.9	82-2400	G	7-3½	13½	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	MAL	AL	PBL	Spl	LAIH	G	CD				
.....	18X4 3½	5850	160	21000	9000	B8 00/20	DB8 00/20	Her WXC	6-4½x4½	429½	4.5	283	45.9	84-2200	G	7-3½	14	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	MAL	AL	PBL	Spl	LAIH	G	CD				
.....	20X4 4	7200	160	24000	10000	B9 00/20	DB9 00/20	Her WXC	6-5½x4½	576½	4.5	330	43.3	104-2200	G	7-3½	14½	Ha	U 4 2	U 4 2	W 16	2F	H 9.11	136	8tr	MAL	AL	PBL	Spl	LAIH	G	CD				
.....	22X4 5	10000	200	31000	14000	B10 60/20	DB10 60/20	Her HXC	6-5½x4½	779½	4.5	505	66.2	163-2000	G	7-3½	17	Ha	U 4 2	U 4 2	W 16	2F	H 9.11	136	8tr	MAL	AL	PBL	Spl	LAIH	G	CD				
Mar-Hert.....	A10 1½	2350	135	1550	4705	B6 50/20	DB6 50/20	Her JXA	6-3½x4½	228½	5.1	166	27.3	68-2500	G	7-3½	10H	No	U 4 2	U 4 2	W 16	BF	H 6.00	82.3	Zen	DR	DR	PBB	Spl	LAIH	a	PX				
.....	A20 2½	3250	135	1550	5345	B7 50/20	DB7 50/20	Her WXC	6-3½x4½	252½	5.3	193	33.7	84-2500	G	7-3½	10H	No	U 4 2	U 4 2	W 16	BF	H 6.00	82.3	Zen	DR	DR	PBB	Spl	LAIH	a	F				
.....	A30 3	4250	156	21000	7955	B8 26/20	DB8 26/20	Her WXC	6-4½x4½	361½	4.7	285	38.9	82-2400	G	7-3½	13½	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	DR	DR	PBB	Spl	LAIH	a	F				
.....	A40 4	4800	167	24000	9100	B9 00/20	DB9 00/20	Her WXC	6-4½x4½	429½	4.5	283	45.9	84-2200	G	7-3½	14	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	DR	DR	PBB	Spl	LAIH	a	F				
.....	A50 5	5850	160	24000	10000	B9 00/20	DB9 00/20	Her WXC	6-4½x4½	429½	4.5	283	45.9	84-2200	G	7-3½	14	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	DR	DR	PBB	Spl	LAIH	a	F				
.....	TH300 4½	6150	163	24000	8585	B8 75/20	DB8 75/20	Her WXC	6-4½x4½	429½	4.5	283	45.9	84-2200	G	7-3½	14	Ha	U 4 2	U 4 2	W 16	2F	H 7.83	110	8tr	DR	DR	PBB	Spl	LAIH	a	F				
.....	TH310 6-5½	7150	163	24000	9650	B8 75/20	DB8 75/20	Her WXC	6-4½x4½	478½	4.4	320	51.3	104-2200	G	7-3½	14	Ha	U 4 2	U 4 2	W 16	2F	H 8.0	153	Zen	DR	DR	PBB	Spl	LAIH	a	F				
.....	TH320 8-9	8050	165	24000	10650	B9 75/20	DB9 75/20	Her HXC	6-5½x4½	707½	4.4	400	60.0	125-1800	G	7-3½	17	Ha	U 4 2	U 4 2	W 16	2F	H 8.0	153	Zen	DR	DR	PBB	Spl	LAIH	a	F				
.....	(13) TH310 8-9	8050	165	24000	10650	B9 75/20	DB9 75/20	Her HXC	6-5½x4½	707½	4.4	400	60.0	125-1800	G	7-3½	17	Ha	U 4 2	U 4 2	W 16	2F	H 8.0	153	Zen	DR	DR	PBB	Spl	LAIH	a	F				
.....	(13) TH320 8-9	11500	196	2216	13750	B10 50/24	DB10 50/24	Her HXC	6-5½x4½	779½	4.5	505	66.2	164-2000	G	7-3½	17	Ha	U 4 2	U 4 2	W 16	2F	H 8.5	154	Zen	DR	DR	PBB	Spl	LAIH	a	F				
Oshkosh.....	JB 1½-2	2280	140	170	10560	4975 B6 00/20	DB7 00/20	Her JXB	6-3½x4½	263½	4.5	164	31.5	68-2500	L	G 7-3½	10H	No	U 4 2	U 4 2	W 16	F	H 5.14	63.7	Zen	DR	DR	PBB	Spl	LAIH	P	TX				
.....	JB 2½-3	2850	140	170	10560	4990 B7 00/20	DB7 00/20	Her JXB	6-3½x4½	263½	4.5	164	31.5	68-2500	L	G 7-3½	10H	No	U 4 2	U 4 2	W 16	F	H 5.14	63.7	Zen	DR	DR	PBB	Spl	LAIH	P	TX				
.....	WLC 3-4	4400	140	18300	6775 B7 50/20	DB7 50/20	Her WXC	6-4½x4½	360½	4.7	285	43.3	91-2000	L	G 7-3½	13½	Ha	U 5 2	U 5 2	W 16	2F	H 6.10	86.2	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	B3B 3-4	4980	140	18300	6775 B7 50/20	DB7 50/20	Her WXC	6-4½x4½	360½	4.7	285	43.3	91-2000	L	G 7-3½	13½	Ha	U 5 2	U 5 2	W 16	2F	H 6.10	86.2	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	B3D 3-4	4980	140	18300	6775 B7 50/20	DB7 50/20	Her WXC	6-4½x4½	360½	4.7	285	43.3	91-2000	L	G 7-3½	13½	Ha	U 5 2	U 5 2	W 16	2F	H 6.10	86.2	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	C3B 4-5	5250	148	165	19700	8400 B10 50/20	B10 50/20	Her WXC	6-4½x4½	363½	4.7	265	43.3	91-2000	L	G 7-3½	13½	Ha	U 5 2	U 5 2	W 16	2F	H 6.10	86.2	Zen	DR	DR	PBB	Spl	LAIH	G	TX				
.....	C3D 4-5	5250	148	165	19700	8400 B10 50/20	B10 50/20	Her WXC	6-4½x4½	363½	4.7	265	43.3	91-2000	L	G 7-3½	13½	Ha	U 5 2	U 5 2	W 16	2F	H 6.10	86.2	Zen	DR	DR	PBB	Spl	LAIH	G	TX				
.....	F3B 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3D 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3E 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3F 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3G 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3H 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3I 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3J 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3K 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3L 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3M 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3N 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3O 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3P 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3Q 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3R 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3S 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3T 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3U 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3½	14½	Ha	U 5 2	U 5 2	W 16	2F	H 7.60	101	Zen	DR	DR	PBB	Spl	LAIH	G	TX					
.....	F3V 6-7	8940	165	22250	9255 B11 25/20	B11 25/20	Her WXC2	6-4½x4½	463½	4.4	297	48.6	95-2000	L	G 7-3																					

TRUCK SPECIFICATIONS TABLE

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Chassis Price—Chassis price quoted applies to the standard wheelbase and specifications listed. All prices are F.O.B. factory.

***—List price not yet established.

Tonnage Rating—Where a spread of ratings is given the maximum ratings are for ideal operating conditions and the minimum for extremely difficult conditions; the ranges between are for varying operating conditions.

Gross Vehicle Weight—Is chassis weight, plus body and cab, plus payload. Gross vehicle weight given for a model is based on maximum recommended tire size and not on tires listed as standard equipment.

Chassis Weight Stripped—Includes gas, oil and water and all things included in chassis price. Does not include the weight of cab.

Maximum Brake H. P. at Given R.P.M.—Is actual dynamometer reading without accessories.

Tractors—Unless given the designation N (meaning not available as tractor), all standard models may be assumed to be available as tractors.

(A) All Torque and Brake Horsepower values listed are based on engine outputs with all Standard Equipment Accessories running and are the same values obtaining with the truck on the road in actual operation.

(N) Not available as tractor.

(T) This designation accompanying a model number indicates vehicle is specifically designed for tractor use only.

c. o. e.—Cab-over-engine design.

(3) **Corbitt**—Larger engines and corresponding auxiliary units provided on all models at extra cost.

(4) **Day Elder**—Model 75—1½ ton—same specifications except price—\$945, and larger tire size—B6.00/20 front and D86.00/20 rear.

(5) **Dodge**—F-61 available as special tractor truck with 146-inch wheelbase with model designation of F-60, at \$2,645. K-61 available as special tractor truck with 146-inch wheelbase with model designation of K-60, at ***.

(5a) **Dodge**—Model H20, ¾-1 ton, gross vehicle weight 6,000 lb., price \$502, has same specifications as H30 except tires which are 7.50/17 and lighter rear springs.

(6) **General Motors**—Models T-18 to T-41 inclusive are also available for export only as coach chassis. Dual performance axle at extra cost in Model T-18. Double reduction axles optional at extra cost in Models T-43, T-46, T-46H, T-51, T-73H and T-74. Worm type axles optional at price deduction in Models T-61, T-75T, T-75, T-75H and T-83. Chassis prices and weights on all cab-over-engine models include the cab. A complete line of superheavy duty models designated T-85 series (4-wheel) and T-95 series (6-wheel) custom-built to exactly meet customer's requirements are available with a range of axles, wheelbases, engines, transmissions, etc., and prices will be quoted upon application.

Gramm—Larger engines and corresponding auxiliary units provided on all models at extra cost when type of service demands. Wheelbases and body mounting dimensions may change to suit special requirements. Double reduction axles available on all models except AX and BX.

Gross weight indicated for each model in the table is the straight rating.

Series CXH is supplied with Hercules JXB engine in Model CXHB and Hercules JXC in Model CXHC.

(7) **Grass Premier**—Eight cylinder engines available on following models: 835 with Lye. GU at \$1,515 list; 865 with Lye. HF at \$4,230; 875 with Lye. AE at \$5,400.

(8) **International Harvester**—A-1, ¾ ton, same as A-2 except less spring leaves and smaller tires.

(9) **Le Moon**—Model 600 available with Lye. AEO at same cost. Models 701 and 801 available with Waukesha GSRL at same cost.

(10) **Sterling**—Rocker arm used in place of springs.

(D) **Sterling**—Diesel Equipped. **Reo**—Model 1D is the longer wheelbase edition of Model 1B. The frame dimension is 7x2¼x3/16. It is furnished at extra cost.

††**Reo**—2J, 2K same as 2H except 166 in. wheelbase and price of \$1,695.

††**Reo**—3J same as 3H except wheelbase of 170 in. and price of \$2,085; 3K same as 3H except 185 in. wheelbase and price of \$2,155. 3M same as 3H except 205 in. wheelbase.

(11) **Studebaker**—S-2 in 141 in. and 165 in. wheelbases has 6 15/16 in. frame depth.

(12) **White**—Each model shown is furnished with different specifications for different tonnage ratings.

*—Factory governed speed 2400 r.p.m.

(12a) **White**—Special prices for each installation.

(13) **Marmon-Herrington**—Available with Hercules Diesel engine. Price on application.

(14) **Ford**—Rear axle ratios 5.14 and 6.6 optional on 1½-ton trucks.

(15) **Mack**—Chassis price and weight include cab.

(16) **Biederman**—Will furnish Continental, Hercules, Waukesha and Lycoming engines at the buyer's option.

(17) **Moreland**—All Moreland models available with Waukesha engines and as six-wheelers with dead axle.

(18) **Walker**—Frame lengths may be changed, within limits, to suit individual requirements, at no additional cost.

(19) **Available**—Models WS125, WS240 and WS300 are available as cab-over-engine types.

MAKES—ALL

AB—American Bosch.
A LaF—American La France.
AL—Auto Lite.
B—Bendix.
BB—Borg & Beck.
BL—Brown-Lipe.
BO—Bendix front, Own rear.
Bo—Blood.
Bu or Bud—Buda.
BW—Borg Warner.
BWs—Bendix front, Westinghouse rear.
C or Col—Columbia.
Car—Carter.
Ch—Chicago.
CI—Ignition by compression.
Cl or Cla—Clark.
Cle—Cleveland.
Co—Covert (transmission).
Co—Covert (clutch).
Con—Continental.
Cot—Cotta Gear.
Cum—Cummins-Diesel.
Det—Detroit Lubricator.
DG—Detroit Gear and Machine.
DR—Delco Remy.
Eat—Eaton.
El—Eisemann.
En—Governor built in engine.
EV—Electro-Vac (gov.) Pierce.
Fe—Feeders.
Fu—Fuller.
Ge—Gemmer.
GO—G. & O.
Ha—Handy (governor).
Ha—Hannum (steering gear).
Has—American Car & Fdry.
Her—Hercules.
Hr—Harrison.
HS—Merchant & Evans (clutch).
HS—American Car & Fdry. (governor).
Jac—Saginaw.
Jo—Jones.
KP—Kandy.
L—Lockheed.
Le—Leibing.
Li—Lipe, W. C.
LN—Leece Neville.
Lo—Long.
LO—Lockheed front, Own rear.
LW—Lockheed front, Wisconsin rear.
Lye—Lycoming.
Mc—McCord.
Ma—Marvel.

ME—Merchant & Evans.

MM—Mechanics Mach.

Mo—Modine (radiator).

Mo—Monarch (governor).

My—Mallory.

NE—North East.

No—Not supplied.

ns—No Standard.

O or Ow—Own.

Op or Opt—Optional.

Pe—Pierce (governor).

Pe—Perfex (radiator).

PS—Peters & Sneed.

RB—Robt. Bosch.

Ro—Rockford.

Ros—Ross.

Sc—Scintilla.

Sch—Wheeler-Schebler.

Shu—Shuler.

SpB—Spicer and Blood.

Spi—Spicer.

Ste or St—Sterling.

Sto.—Bat.—Storage Battery.

Str—Stromberg.

TH—Tillotson.

TI—Timken.

TWH—Timken Wisconsin Herrington.

WG—Warner Gear.

Wa—Waukesha (governor).

Wau—Waukesha.

W or Wis—Wisconsin.

Ws—Westinghouse.

Yo—Young.

Zen—Zenith.

BRAKES—SERVICE

Location

2—Two Wheels, rear only.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4/6—Brakes on four rear wheels effective on all wheels through driveshaft.
T/4—Brake on transmission effective on all four wheels through driveshaft.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.
J—Jackshaft.
P—Propeller shaft.

Type

I—Internal.
X—External.

OPERATION

A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels.
4—Four wheels.
R—Worm or bevel gearshaft.
T—Transmission.
F—Driveshaft.

Type

D—Tru-Stop disk.
I—Internal.
X—External.

BRAKE DRUMS

Material

a—Cast alloy iron.
A—American Car Fdry.
C—Centrifuse.
D—Dayton.
E—Ermalite.
G—Gunite.
H—Hunt Spiller.
c—Cast Iron.
s—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

CLUTCH

Type

D—Multiple disk.
dp—Double plate.
O—Plate in oil.
P—Single plate.

ENGINE

Valve Arrangement

F—Inlet valve in head; exhaust valve at side.
H—In head.
L—“L” head, valves at side.
T—Inlet and exhaust on opposite sides.

Camshaft Drive

C—Chain.
G—Gear.

Piston Material

A—Aluminum alloy.
B—Semi-steel.
C—Cast iron.
N—Nickel iron.
S—Aluminum alloy with strut.

Main Bearings

r—Rear main bearing.

Oiling System

CC—Pressure to main, connecting rod and camshaft bearings.
FP—Pressure to main, connecting rod camshaft bearings and piston pins.
PC—Pressure to mains and connecting rod bearings.
PG—Pump, gravity and splash.
PS—Pressure with splash.

FUEL SYSTEM

Fuel Feed

E—Electric pump.
G—Gravity.
M—Mechanical pump.
P—Pressure.
V—Vacuum.
B—Bosch.
C—Cummins.

REAR AXLE

Final Drive and Type

B—Bevel.
C—Chain.
D—Dead.
F—Full-floating.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
w/2—Worm or Double Reduction Optional.
½—Semi-floating.
¾—Three-quarter floating.

Drive and Torque

A—Radius Rods and Torque Arm.
H—Hotchkiss (springs).
R—Radius Rods.
T—Torque Arm.
U—Torque Tube.

TIRES

B—Balloons.
DB—Dual Balloons.
P—High Pressure Pneumatics.
DP—Dual High Pressure Pneumatics.
S—Solids.
DS—Dual Solids.
°—Pneumatics at extra cost.

TRANSMISSION

Location

A—Amidships.
J—Unit with jackshaft.
U—Unit with engine.

Auxiliary Location

No—Not furnished.
O2—2 speed axle unit optional at extra cost.
Op—Optional at extra cost.
A—Amidships.
R—Rear of amidships main transmission.
U—Unit with engine.

WHEELS DRIVEN

2C—Center pair of rear wheels.
2R—Rear pair of rear wheels.
4F—Front and center pair of rear wheels.
4R—Four rear wheels.
6—Six wheels.

AMERICAN AGRICULTURAL TRACTORS

MAKE AND MODEL	GENERAL										ENGINE										CLUTCH		DRIVE					BELT PULLEY	
	No. of Plovs	Size of Plov Plowing Speed (M.P.H.)	Net Weight of Tractor (Lbs.)	Wheelbase (Ins.)	Minimum Turning Diameter (Ft.)	Ground Clearance (Ins.)	Drawbar Adjustable	Belt and Drawbar Rating (H.P.)	No. of Cylinders Bore and Stroke (Ins.)	Engine Type	Valve Arrangement	Normal R.P.M. at Plowing Speed	Ignition System Make	Carburetor Make	Fuel Recommended	Air Cleaner Make	Oiling System Type	Cooling System Type	TYPE AND MAKE	Drive Type to Trac- tion Members	Final Drive, Thru	Non-Drive Wheels	Wheel or Track	Diameter and Face of Tractor Wheel (Ins.)	Width and Length of Driven Track (Ins.)	No Forward Speeds	Diameter (Ins.)	Face (Ins.)	
Allis-Chalmers.. WC	2	14 3.50	2700 87	8	26	H...	21-12	4-4x4	V..	I..	1300	Sein.	Zen.	GD.	Uni.	DS.	Pu.	SP-Rock.	SG...	Hub.	2 Wh.	40x6				4 9	6 1/2	8 1/2	
Allis-Chalmers.. M	3-4	14 3.20	6200 56 1/2	5 1/2	10 1/2	H...	32-22	4-4 1/2 x 5	V..	I..	960	Sein.	Zen.	GK.	Vor.	DS.	Pu.	SP-Own.	SG...	Spks.	Tr.	Tr.	12x56 1/2	4 12	8 1/2	8 1/2	8 1/2		
Allis-Chalmers.. L	10-12	14 4.10	21600 85	8 1/2	16 1/2	H...	90-60	6-5 1/2 x 6 1/2	V..	I..	1050	Sein.	Zen.	G.	Vor.	DS.	Pu.	DP-Own.	SG...	Spks.	Tr.	Tr.	16x85 1/2	6 20	15	8 1/2	8 1/2		
Allis-Chalmers.. K	5	14 4.50	11000 87	8	12 1/2	H...	44-36	4-5 1/2 x 6	V..	I..	1050	Sein.	Zen.	G.	Vor.	DS.	Pu.	SP-Own.	SG...	Spks.	Tr.	Tr.	15x67	3 12	8 1/2	8 1/2	8 1/2		
Allis-Chalmers.. UM	3	14 5.00	4600 76 1/2	8	9	H...	31-18	4-4 1/2 x 5	V..	I..	1200	Sein.	Zen.	G.	Vor.	DS.	Pu.	DP-Rock.	SG...	Axle.	2 Wh.	42x11 1/2	18x81 1/2	4 10 1/2	7 1/2	8 1/2	8 1/2		
Allis-Chalmers.. UMC	3	14 3.33	4600 87 1/2	9	30	H...	31-18	4-4 1/2 x 5	V..	I..	1200	Sein.	Zen.	GK.	Vor.	DS.	Pu.	DP-Rock.	SG...	Axle.	2 Wh.	42x			3 10 1/2	7 1/2	8 1/2		
Allis-Chalmers.. E	4	14 3.25	6000 80 1/2	15 1/2	11 1/2	H...	40-25	4-5 1/2 x 6	V..	I..	1000	Sein.	Zen.	G.	Vor.	DS.	Pu.	ES-Own.	SG...	Spks.	2 Wh.	50x12	18x104	2 13	8 1/2	8 1/2	8 1/2		
Allis-Chalmers.. 6A	4	14 3.70	6000 80 1/2	15	11 1/2	H...	43-28	6-4 1/2 x 4 1/2	V..	I..	1200	Spl.	Zen.	G...	Vor.	DS.	Pu.	DP-TDi.	SG...	Axle.	2 Wh.	48x12			3 13 1/2	8	8 1/2		
*Bates St. M.. G	3	14 2.33	5300 75	7 1/2	12	H...	40-25	4-4 1/2 x 6	V..	I..	1000	Bos.	Kin.	G...	Vor.	DS.	Pu.	SP-TDi.	SG...	Hub.	2 Tr.	Tr.	12x58	3 12	8 1/2	8 1/2	8 1/2		
*Bates St. M.. 6-35	6	14 2.75	10750 70	6	12	H...	52-43	6-4 1/2 x 4 1/2	V..	I..	1500	Bos.	Sch.	G...	Vor.	DS.	Pu.	SP-TDi.	SG...	Hub.	2 Tr.	Tr.	12x70	3 12	9	9	9		
*Bates St. M.. 6-50	8	14 2.75	14000 82	7	14	H...	66-54	6-4 1/2 x 5 1/2	V..	I..	1500	Bos.	Sch.	G...	Vor.	DS.	Pu.	DP-TDi.	SG...	Hub.	2 Tr.	Tr.	14x82	3 12	9	9	9		
*Bates St. M.. 4-80	12	14 2.50	23000 104	9	17	H...	90-80	4-6 1/2 x 7	V..	I..	1000	Bos.	Str.	G...	Vor.	DS.	Pu.	DP-TDi.	SG...	Hub.	2 Tr.	Tr.	18x104	3 16	10 1/2	10 1/2	10 1/2		
Beeman.. MS	1	8 2.25	540	6	10	H...	4-2	1-3 1/2 x 1 1/2	V..	I..	1200	Hel.	Kin.	G...	Don.	CS.	Th.	Mo-Own.	SG...	Axle.	Wh.	Tr.			4	5	5		
Beeman.. Jr	1	6 2.00	435	4 1/2	14	H...	1 1/2-1 1/2	1-2 1/2 x 2 1/2	V..	I..	1250	Own.	Kin.	G...	Don.	CS.	Th.	Mo-Own.	SG...	Axle.	Wh.	Tr.			3	3	3		
Beeman.. Light 4	2	10 2.00	2000 75 1/2	23	23	H...	4-3 1/2 x 4	4-3 1/2 x 4	V..	I..	1250	Own.	Kin.	G...	Don.	DS.	Pu.	SP...	IG...	Wh.	36x4 1/2				2 10	6 1/2	6 1/2		
Case.. C	2	14 2.33	5300 66	20	11	H...	4-3 1/2 x 5 1/2	4-3 1/2 x 5 1/2	V..	I..	1100	Own.	G...	G...	Own.	DS.	Pu.	SP-TDi.	Cha.	Axle.	2 Wh.	42x12			1 10 1/2	6 1/2	6 1/2		
Case.. CC	2-3	14 2.63	3615 89	26	11	H...	4-3 1/2 x 5 1/2	4-3 1/2 x 5 1/2	V..	I..	1100	Own.	G...	G...	Own.	DS.	Pu.	SFTDi.	Cha.	Axle.	1 Wh.	42x8			1 10 1/2	6 1/2	6 1/2		
Case.. L	3-5	14 2.50	4815 79	26	11	H...	4-4 1/2 x 6	4-4 1/2 x 6	V..	I..	1100	Own.	G...	G...	Own.	DS.	Pu.	SP-TDi.	Cha.	Axle.	2 Wh.	48x12			1 13	8 1/2	8 1/2		
Caterpillar.. 22	3	16 2.6	6150	10 1/2	9	H...	28-24	4-4x5	V..	I..	1250	Eis.	Zen.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	10x54 1/2	3 10 1/2	6 1/2	6 1/2	6 1/2		
Caterpillar.. 28	4	16 2.6	7870	11 1/2	10	H...	Var.	4-4 1/2 x 6 1/2	V..	I..	1100	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	11x56 1/2	3 11 1/2	6 1/2	6 1/2	6 1/2		
Caterpillar.. 35	6	14 2.5	12597	14	10 1/2	H...	46-39	4-4 1/2 x 6 1/2	V..	I..	850	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	16x71 1/2	4 11 1/2	8 1/2	8 1/2	8 1/2		
Caterpillar.. 40 Diesel	6	14 2.5	14708	14	10 1/2	H...	49-44	4-5 1/2 x 8	V..	I..	850	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	16x74 1/2	4 11 1/2	8 1/2	8 1/2	8 1/2		
Caterpillar.. 50	9	14 2.4	18044	16	11 1/2	H...	60-53	4-5 1/2 x 6 1/2	V..	I..	850	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	18x81 1/2	4 13 1/2	10	10	10		
Caterpillar.. 50 Diesel	9	14 2.4	20134	16	11 1/2	H...	66-56	4-5 1/2 x 8	V..	I..	850	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	18x81 1/2	4 13 1/2	10	10	10		
Caterpillar.. 70	12	14 2.7	30753	18 1/2	10 1/2	H...	89-77	4-7 1/2 x 8	V..	I..	700	Eis.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	20x97 1/2	6 14 1/2	13	13	13		
Caterpillar.. 75 Diesel	12	14 2.7	32534	18 1/2	10 1/2	H...	98-83	6-5 1/2 x 8	V..	I..	820	Oil.	Ens.	GD.	Own.	DS.	Pu.	SP-Own.	SG...	Hub.	2 Tr.	Tr.	20x97 1/2	6 14 1/2	13	13	13		
Cletrac.. 20	3-4	14 2.75	6000	13	13 1/2	H...	27-23	4-4x4 1/2	V..	I..	1250	Bos.	Til.	G...	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	12 Tr.	Tr.			1 10 1/2	6 1/2	6 1/2		
Cletrac.. 25	4-5	14 2.75	7000	14	13 1/2	H...	33-27	6-3 1/2 x 4 1/2	V..	I..	1250	D-R.	Til.	G...	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	12 Tr.	Tr.			1 12	6 1/2	6 1/2		
Cletrac.. 35	5-7	14 3.00	10400	16	15 1/2	H...	46-41	6-4 1/2 x 4 1/2	V..	I..	1450	D-R.	Til.	G...	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	14 Tr.	Tr.			1 13	8 1/2	8 1/2		
Cletrac.. 55	6-8	14 3.00	12000	21	8	H...	63-55	6-4 1/2 x 5	V..	I..	1575	D-R.	Sch.	G...	Vor.	DS.	Pu.	SP-B&B.	SG...	Axle.	18 Tr.	Tr.			1 15	13	13		
Cletrac.. 80	12	14 2.50	22700	14	16	H...	90-83	6-5 1/2 x 6	V..	I..	1120	Bos.	Til.	G...	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	16 Tr.	Tr.			1 12	15	15		
Cletrac.. 35 Diesel	4-6	14 3.00	11500	18	15 1/2	H...	60-46	6-4 1/2 x 5 1/2	V..	I..	1200	Oil.	Vor.	Oil.	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	16 Tr.	Tr.			3 15	18 1/2	18 1/2		
Cletrac.. 80 Diesel	12-14	14 2.75	23000	96	18	16	H...	6-5x6	V..	I..	1300	Oil.	Vor.	Oil.	Vor.	DS.	Pu.	DP-Long	SG...	Axle.	16 Tr.	Tr.	17x			3 24	15	15	
Eagle.. 6A	3	14 3.33	4800 80	30	10 1/2	U..	37-22	6-4x4 1/2	V..	I..	1416	Spl.	Zen.	G...	Vor.	DS.	Pu.	DP-TDi.	SG...	Axle.	2 Wh.	48x12			3 16	8	8		
Eagle.. E20-35	3	14 3.00	7500 84	28	13	H...	35-20	2-8x9	H..	I..	425	Dix.	Sch.	KD.	Own.	MF.	Pu.	ES-Own.	SG...	Axle.	2 Wh.	48x14			2 24	10	10		
Eagle.. H16-30	3	14 3.00	6800 87	30	15	H...	30-16	2-8x8	H..	I..	425	Dix.	Sch.	KD.	Own.	MF.	Pu.	ES-Own.	SG...	Hub.	2 Wh.	52x12			2 24	10	10		
Eagle.. H20-40	3	14 3.00	7840 94	32	15	H...	40-20	2-8x10	H..	I..	425	Spl.	Sch.	KD.	Own.	MF.	Pu.	ES-Own.	SG...	Hub.	2 Wh.	52x18			2 24	10	10		
Eagle.. H22-45	3	14 3.00	7840 94	32	15	H...	45-22	2-8 1/2 x 10	H..	I..	425	Dix.	Sch.	KD.	Own.	MF.	Pu.	ES-Own.	SG...	Hub.	2 Wh.	52x18			2 24	10	10		
Fordson.. 3	14 3.12	3000 63	21 1/2	9	H...	20-11	4-4 1/2 x 5	V..	I..	1100	Bos.	Kin.	K.	Own.	CS.	Th.	Mo-Own.	Wo.	Axle.	2 Wh.	42x12			3 9 1/2	6 1/2	6 1/2			
Huber.. Mod. Farm	2-3	14 3.00	3800 81 1/2	25 1/2	15	H...	36-20	4-4 1/2 x 5 1/2	V..	I..	1200	Bos.	Zen.	G...	Pom.	DS.	Pu.	SP-TDi.	SG...	Axle.	2 Wh.	42x10			3 14	6 1/2	6 1/2		
Huber.. 20-36	3-4	14 3.00	5500 83	26	10	H...	45-32	4-5 1/2 x 6 1/2	V..	I..	1200	Bos.	Zen.	G...	Pom.	DS.	Pu.	SP-TDi.	SG...	Axle.	2 Wh.	50x12			2 17	8 1/2	8 1/2		
Huber.. 32-45	4-5	14 3.00	8000 83	26	10	H...	45-32	4-5 1/2 x 6 1/2	V..	I..	1200	Bos.	Zen.	G...	Pom.	DS.	Pu.	MD-TDi.	SG...	Axle.	2 Wh.	50x14			2 17	8 1/2	8 1/2		
Huber.. Super Four	4-5	14 3.00	9000 95	28	8	H...	62-40	4-5 1/2 x 6 1/2	V..	I..	1100	Eis.	Zen.	G...	Pom.	DS.	Pu.	MD-TDi.	SG...	Axle.	2 Wh.	56x20			2 15	9 1/2	9 1/2		
John Deere.. A	2	14 3.33																											

AMERICAN GASOLINE

MAKE AND MODEL	GENERAL						ENGINE						ELECTRICAL SYSTEM						GOVERNOR					
	Passenger Rating	Price—Chassis \$	Standard Wheelbase (Ins.)	Tread—Front and Rear (Ins.)	Chassis Weight (Lbs.)	Tires Type and Sizes		Make and Model	Number of Cylinders, Bore and Stroke (Ins.)	Rated Horsepower (A.M.A.)	Maximum Brake H.P. at Specified R.P.M.	Valve Arrangement	Oiling System		Fuel System		Ignition System		Battery		Type	Maximum Governed Speed (M.P.H.)	Integral with Engine	
						Front (Ins.)	Rear (Ins.)						Type	Oil Pressure to—	Carburetor Make and Type	Carburetor Size (Ins.)	Feed	Make	Current Source	Generator and Starter Make				Make	Voltage and Amp. Hrs. Capacity
A.C.F. H12	30	188	79-70	.....	9.75/20	9.75/20d	HaS. 166-3	6-4 1/4 x 5 1/2	43.3	110-2200	I.	abcef.	Zen-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	50	No.	No.
A.C.F. H9	40	235	81-74	.....	9.75/22	9.75/22d	HaS. 180	6-5 1/2	60.0	180-2200	I.	abcef.	Zen-Up. 2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	52	No.	No.
A.C.F. H15	30	188	81 1/4-70 1/4	.....	9.00/20	9.00/20d	HaS. 135	6-4 1/4 x 5	48.6	135-2600	I.	abcef.	Zen-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	60	No.	No.
A.C.F. H13	30	158	81 1/4-70 1/4	.....	9.75/20	9.00/20d	HaS. 130	6-4 1/4 x 5	43.3	124-2800	I.	abcef.	Zen-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	41	No.	No.
Brockway 90B	17	1525	149	62-64 1/4	4200	7.00/20	7.00/20d	Cont. 28B	6-3 3/4 x 4 1/2	27.3	78-3100	L.	abce.	Zen-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	6-133	Su.	40	No.	No.
Brockway 120B	21	2750	188	62-64 1/4	5800	7.50/20	7.50/20d	Cont. 30B	6-4 1/4 x 4 1/2	38.4	82-2400	I.	abce.	Zen-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	12-133	Su.	40	No.	No.
Brockway 140B	25	3050	188	62-66	6385	8.25/20	8.25/20d	Cont. 30B	6-4 1/4 x 4 1/2	38.4	82-2400	I.	abce.	Zen-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	12-133	Su.	40	No.	No.
Brockway 141B	25	3400	188	66-69 1/2	7600	9.00/20	9.00/20d	Cont. 30B	6-4 1/4 x 4 1/2	38.4	82-2400	I.	abce.	Zen-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	12-133	Su.	35	No.	No.
Brockway 170B	29	3700	188	66-69 1/2	7700	9.00/20	9.00/20d	Cont. 33B	6-4 1/4 x 4 1/2	40.8	106-2600	I.	abce.	Zen-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	12-133	Su.	35	No.	No.
Day-Elder 30B	30	5200	237	77-74	9500	9.00/22	9.00/22d	Here. RXC	6-4 1/4 x 5 1/2	51.3	114-2200	L.	ab.	Zen-Do. 1 1/2	P.	D-R.	B.	Exi.	12-140	Su.	40	No.	No.	
Fageol 1350	.....	4400	70 1/2-64 1/2	10200	8.25/20	8.25/20	Wauk. 6BK	6-3 3/4 x 4 1/2	33.7	82-2800	L.	abede	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-158	Ce.	No.	No.	No.
Fageol 2500	.....	4975	70 1/2-67 1/2	10600	8.25/20	8.25/20d	Wauk. 6MK	6-4 1/4 x 3 3/4	40.8	82-2200	L.	abede	Zen-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-158	Ce.	No.	No.	No.
Fageol 3000	.....	5375	70 1/2-69 1/2	10900	9.00/20	9.00/20d	Wauk. 6-110	6-4 1/4 x 5	38.4	110-2800	F.	abede	Zen-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-158	Ce.	No.	No.	No.
Fargo 80	21	165	64 1/4-66 1/4	.....	7.50/20	7.50/20d	Own. Z	6-3 3/4 x 5	31.5	96-3000	I.	abce.	Det-Up. 1 1/2	P.	D-R.	B.	N-D.	Wil.	12-120	Su.	44.6	Y.	Y.
Fargo 81	21	165	64 1/4-66 1/4	.....	7.50/20	7.50/20d	Own. Z	6-3 3/4 x 5	31.5	96-3000	I.	abce.	Det-Up. 1 1/2	P.	D-R.	B.	N-D.	Wil.	12-120	Su.	43.4	Y.	Y.
Fargo 90	21	172	72 1/2-72 1/2	.....	8.25/20	8.25/20d	Own. CG	8-3 3/4 x 5	39.2	115-3000	I.	abce.	Str-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-160	Su.	47.4	Y.	Y.
Fargo 91	21	172	72 1/2-72 1/2	.....	7.50/20	7.50/20d	Own. CG	8-3 3/4 x 5	39.2	115-3000	I.	abce.	Str-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-160	Su.	57.0	Y.	Y.
Fargo 94	29	238	72 1/2-72 1/2	.....	8.25/20	8.25/20d	Own. CG	8-3 3/4 x 5	39.2	115-3000	I.	abce.	Str-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-144	Su.	58.7	Y.	Y.
Fargo 95	29	238	72 1/2-72 1/2	.....	9.00/20	9.00/20d	Own. CG	8-3 3/4 x 5	39.2	115-3000	I.	abce.	Str-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-160	Su.	49.3	Y.	Y.
Flexible 20B-94	20-24	203 1/2	65 1/2-68 1/2	5500	8.25/20	8.25/20d	Buick 90	8-3 3/4 x 5	35.1	116-3200	I.	abce.	Mar. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-235	No.	No.	No.	No.	
Flexible 16C-64	16-20	201	56 1/2-63 1/2	3650	7.00/20	7.00/20d	Chev. 16	6-3 3/4 x 4	26.3	60-3000	I.	ac.	Car. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-90	No.	No.	No.	No.	
Gramm 175	21	190	66-69 1/2	6750	7.50/20	7.50/20d	Cont. 20R	6-4 1/4 x 4 1/2	40.8	82-2400	I.	abed.	Zen. 1 1/2	P.	L-N.	B.	L-N.	USL.	12-	Su.	51.0	.....	.....
Gramm 178	25	190	66-69 1/2	7000	8.25/20	8.25/20d	Cont. 21R	6-4 1/4 x 4 1/2	45.9	82-2400	I.	abed.	Zen. 1 1/2	P.	L-N.	B.	L-N.	USL.	12-	Su.	51.0	.....	.....
Gramm 131	35	236 1/2	71 1/2-71 1/2	9600	9.00/20	9.00/20d	Cont. 16H	6-4 1/4 x 5 1/2	54.0	82-2400	I.	abed.	Zen. 1 1/2	P.	L-N.	B.	L-N.	USL.	12-	Su.	50.0	.....	.....
Gullder CB25	21	2750	174	64-64 1/4	5200	7.50/20	7.50/20d	Here. WXC	6-4 1/4 x 4 1/2	43.3	73-2800	L.	abce.	Zen-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Gullder EB26	23	3450	184	64-64 1/4	5200	8.25/20	8.25/20d	Here. WXC2	6-4 1/4 x 4 1/2	40.8	73-2400	L.	CS abce.	Zen-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Gullder GB35	29	4550	184	64-64 1/4	5200	8.25/20	8.25/20d	Here. WXC3	6-4 1/4 x 4 1/2	40.8	73-2400	L.	CS abce.	Zen-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Gullder GB45	29	5750	220	71 1/2-69 1/2	7450	9.00/20	9.00/20d	Here. YXC2	6-4 1/4 x 4 1/2	40.8	73-2400	L.	CS abce.	Zen. 1 1/2	P.	L-N.	B.	L-N.	Exi.	12-134	Su.	43	No.	No.
Indiana 16	22-24	130	70 1/2-79 1/2	10510	9.75/20	9.75/20d	Here. WXC	6-4 1/4 x 4 1/2	33.4	75-2400	L.	abce.	Str-Up. 1 1/2	P.	A-L.	B.	A-L.	Exi.	6-120	Su.	43	No.	No.	
Indiana 14B	16-21	180	61-67 1/2	5100	7.50/20	7.50/20d	Here. JXC	6-3 3/4 x 4 1/2	33.7	75-2400	L.	abce.	Str-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-120	Su.	41.0	No.	No.	
Mack CG	20-21	168 1/2	70 1/2-70 1/2	.....	9.00/18	9.00/18	Own. BG	6-3 3/4 x 5	31.6	90-3000	L.	abed.	Str-Up. 1 1/2	P.	R-Bos.	B.	D-R.	Exi.	12-118	Su.	49	No.	No.
Mack CQ	31	178	82-73	.....	9.00/22	9.00/22d	Own. CF	6-4 1/4 x 5 1/2	43.3	118-2400	L.	abed.	Str-Up. 1 1/2	P.	R-Bos.	B.	N-E.	Exi.	12-158	M.	48.7	No.	No.
Mack CL	29-31	169	81-75 1/2	.....	10.50/20	10.50/20d	Own. CF	6-4 1/4 x 5 1/2	43.3	118-2400	L.	abed.	Str-Up. 1 1/2	P.	R-Bos.	B.	N-E.	Exi.	12-158	M.	47.3	No.	No.
Mack BT	44	196	82 1/2-72 1/2	.....	12.00/20	12.00/20d	Own. BQ	6-4 1/4 x 5 1/2	54.1	132-2200	L.	abed.	Str-Up. 1 1/2	P.	R-Bos.	B.	L-N.	Exi.	12-237	Ce.	46.7	Y.	Y.
Reo 21A	12	1145	166	59 1/2-65 1/2	3970	6.50/20	6.50/20d	Own. S3	6-3 3/4 x 5	27.3	75-2800	L.	abce.	Str-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-228	Su.	52.0	Y.	Y.
Reo 31E	18	188	69 1/2-70 1/2	6375	8.25/20	8.25/20d	Own. S5	6-3 3/4 x 5	31.5	85-2800	L.	abce.	Str-Do. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-133	Su.	52.0	Y.	Y.	
Reo 31E	21	2755	188	69 1/2-70 1/2	6515	8.25/20	8.25/20d	Own. S8	8-3 3/4 x 5	36.5	110-2800	L.	abed.	Sch-Up. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-133	Su.	52.0	Y.	Y.
Twin Coach 40	.....	194	78 1/2	.....	10.50/40	10.50/40d	Own. WXC	6-4 1/4 x 4 1/2	40.8	70-2400	L.	abed.	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Twin Coach 30	.....	140	72 1/2	.....	9.00/18	9.00/18d	Own. WXC	6-4 1/4 x 4 1/2	40.8	83-2400	L.	abed.	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Twin Coach 20	.....	140	72	.....	9.00/18	9.00/18d	Own. WXC	6-4 1/4 x 4 1/2	40.8	83-2400	L.	abed.	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Twin Coach 15	.....	132	58 1/2	.....	7.50/18	7.50/18d	Own. JXC	6-3 3/4 x 4 1/2	33.7	73-2800	L.	abed.	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	6-	Su.	43	No.	No.
Twin Coach 30A	.....	172	72 1/2	.....	9.00/18	9.00/18d	Own. WRX	6-4 1/4 x 4 1/2	33.7	92-2400	L.	abed.	Zen. 1 1/2	P.	D-R.	B.	D-R.	Exi.	12-134	Su.	43	No.	No.
Twin Coach 19	.....	142	64 1/2	.....	9.00/15	9.00/15d	Own. JXCT	6-3 3/4 x 4 1/2</															

MOTOR BUS CHASSIS

TRANSMISSION										REAR AXLE				BRAKES				SPRINGS		RUNNING GEAR								MAKE AND MODEL
Clutch—Make and Type	Gearset or Electric Driven System				Universal Joints, Number and Make	Make and Model	Final Drive	Type	Ratio	Drive and Torque taken by—	Service		Hand		Front	Rear	Stacker-Type	Front Axle Make		Steering Gear		Wheels						
	Make	Location	No. of Forward Speeds	Low Speed Gear Reduction							Type and Location	Operation	Lining Area (Sq. Ins.)	Type and Location				Lining Area (Sq. Ins.)	Length and Width (Ins.)	Length and Width (Ins.)	Make	Type	Outside Dia. of Min. Turning Circle (Ft.)	Make	Number	Type and Material		
B-L-SP...	B-L	Eng.	4	6.15	3-Spi.	Tim.	58207	SB.	FF.	5.12	Hot.	I-Fw.	Air.	576	E-Ds.	160	52-3 1/2	60-4	M.	Tim.	Ross.	C&L.	60	Budd.	6 D-P.	A.C.F.	H12	
Long-DP...	B-L	Eng.	3	3.80	2-Spi.	Tim.	59021	SB.	FF.	5.12	Hot.	I-Fw.	Air.	850	E-Ds.	220	54-3 1/2	64-5	M.	Tim.	Ross.	C&L.	80	Budd.	6 D-P.	A.C.F.	H9	
B-L-SP...	B-L	Eng.	3	3.72	2-Spi.	Tim.	58212	SB.	FF.	5.12	Hot.	I-Fw.	Air.	622	E-Ds.	160	52-3 1/2	60-4	M.	Tim.	Ross.	C&L.	60	Hoop.	6 S-P.	A.C.F.	H15	
B-L-SP...	B-L	Eng.	3	3.72	2-Spi.	Tim.	58212	SB.	FF.	5.57	Hot.	I-Fw.	Air.	622	E-Ds.	160	56-3 1/2	60-3 1/2	M.	Tim.	Ross.	C&L.	55	Hoop.	6 S-P.	A.C.F.	H13	
B&B-SP...	War	Eng.	4	6.40	3-Spi.	Tim.	54300H	SB.	FF.	5.83	Hot.	I-Fw.	H-V	366	E-Ds.	23 1/2	37-2 1/4	52-2 1/2	M.	Col.	Ross.	C&L.	54	Budd.	6 D-P.	Brockway	90B	
B-L-SP...	B-L	Eng.	4	6.14	3-Spi.	Tim.	54300H	SB.	FF.	5.83	Hot.	I-Fw.	H-V	366	E-Ds.	45	40-2 1/2	60-3	M.	Col.	Ross.	C&L.	60	Budd.	6 D-P.	Brockway	120B	
B-L-SP...	B-L	Eng.	4	6.14	3-Spi.	Wisc.	6000L	IG.	FF.	6.66	Hot.	I-Fw.	H-V	366	E-Ds.	45	40-2 1/2	60-3	M.	Col.	Ross.	C&L.	60	Budd.	6 D-P.	Brockway	140B	
B-L-SP...	B-L	Eng.	4	6.14	3-Spi.	Wisc.	72000L	IG.	FF.	7.27	Hot.	I-Fw.	H-V	417	E-Ds.	45	40-2 1/2	60-3	M.	Shu.	Ross.	C&L.	60	Budd.	6 D-P.	Brockway	141B	
B-L-SP...	B-L	Eng.	4	6.63	3-Spi.	Wisc.	72000H	IG.	FF.	7.27	Hot.	I-Fw.	H-V	417	E-Ds.	45	40-2 1/2	60-3	M.	Shu.	Ross.	C&L.	60	Budd.	6 D-P.	Brockway	170B	
B-L-SP...	B-L	Eng.	4	6.27	3-Spi.	Tim.	59000	SB.	FF.	6.12	Hot.	I-Fw.	Air.	606	E-Ds.	121	46-3	64-4	M.	Tim.	Ross.	C&L.	.....	Budd.	6 S-P.	Day-Elder	30B
Long-SP...	War	Eng.	4	6.40	3-Spi.	Tim.	54200H	SB.	FF.	5.80	Hot.	I-Fw.	H-V	306	E-Ds.	61	60-3	60-3	R.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Fageol	1350
B-L-SP...	B-L	Eng.	4	6.30	3-Spi.	Tim.	56200H	SB.	FF.	6.16	Hot.	I-Fw.	H-V	355	E-Ds.	46	60-3	60-3	R.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Fageol	2500
B-L-SP...	B-L	Eng.	4	6.30	3-Spi.	Tim.	58200H	SB.	FF.	7.20	Hot.	I-Fw.	H-V	398	E-Ds.	46	60-3	60-3	R.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Fageol	3000
B&B-SP...	Own	Eng.	4	6.86	3-Cle	Clas.	B640	SB.	FF.	6.37	Hot.	I-Fw.	H-V	351	E-Ds.	44	42-3	56-3 1/2	M.	Own.	Sag.	W&S.	56	Budd.	6 D-P.	Fargo	80	
B&B-SP...	Own	Eng.	4	6.86	3-Cle	Clas.	B640	SB.	FF.	6.37	Hot.	I-Fw.	H-V	351	E-Ds.	44	42-3	56-3 1/2	M.	Own.	Sag.	W&S.	56	Budd.	6 D-P.	Fargo	81	
B&B-SP...	Own	Eng.	4	6.86	3-Cle	Tim. . . . .	.....	Wo.	FF.	6.20	Hot.	I-Fw.	H-V	385	E-Ds.	89	44-3	60-3 1/2	M.	Own.	Sag.	W&S.	59 1/4	Budd.	6 D-P.	Fargo	90
B&B-SP...	Own	Eng.	4	6.86	3-Cle	Tim. . . . .	.....	Wo.	FF.	5.00	Hot.	I-Fw.	H-V	385	E-Ds.	89	44-3	60-3 1/2	M.	Own.	Sag.	W&S.	62 1/2	Budd.	6 D-P.	Fargo	91
B&B-SP...	Own	Eng.	4	6.86	4-Cle	Tim. . . . .	.....	Wo.	FF.	6.20	Hot.	I-Fw.	H-V	385	E-Ds.	44	52-3	60-3 1/2	M.	Own.	Sag.	W&S.	75	Budd.	6 D-P.	Fargo	94
B&B-SP...	Own	Eng.	4	6.86	4-Cle	Tim. . . . .	.....	Wo.	FF.	6.20	Hot.	I-Fw.	H-V	600	E-Ds.	89	52-3	60-3 1/2	M.	Own.	Sag.	W&S.	75	Budd.	6 D-P.	Fargo	95
B-L-SP...	B-L	Eng.	3	3.72	4-Spi.	Tim.	56200H	SB.	FF.	5.28	Hot.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	41-2 1/2	57 1/2-3	M.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Flxible	20B-94
Che-SP...	Che	Eng.	4	7.23	3-Che	Chevrolet	.....	SB.	1/2 F.	5.43	TT.	I-Fw.	M-V . . . .	.....	I-R.	.....	26-1 1/2	45-2 1/2	M.	Che.	.....	W&S.	67	Che.	D-P.	Flxible	16C-64
B-L-SP...	B-L	Eng.	4	6.20	3-Blo	Tim.	58200	SB.	FF.	.....	.....	I-Fw.	H-V	375	E-Ds.	45	44-2 1/2	60-3	M.	Tim.	Ross.	C&L.	.....	Budd.	4 D-P.	Gramm	175
B-L-SP...	B-L	Eng.	4	6.30	4-Blo	Wisc.	69317	DR.	FF.	.....	.....	I-Fw.	H-V	375	E-Ds.	31	44-2 1/2	60-3	M.	Tim.	Ross.	C&L.	.....	Budd.	4 D-P.	Gramm	178
Ful-MDD	Ful	Eng.	4	6.30	4-Blo	Wisc.	12527	DR.	FF.	.....	.....	I-Fw.	H-V	576	E-Ds.	61	44-3	60-4	M.	Tim.	Ross.	C&L.	.....	Budd.	4 D-P.	Gramm	131
B-L-SP...	Eng.	4	.....	3-Spi.	Tim.	54200	SB.	FF.	5.00	RR.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	40-2 1/2	50-3	M.	Tim.	Ross.	C&L.	.....	Budd.	6 D-P.	Guildler	CB25	
B-L-SP...	B-L	Eng.	4	6.14	3-Spi.	Tim.	56200	SB.	FF.	5.50	RR.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	42-2 1/2	60-3	M.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Guildler	EB26
B-L-SP...	Eng.	4	.....	3-Spi.	Tim.	35000H	SB.	FF.	.....	RR.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	42-3	60-3	M.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Guildler	GB35	
B-L-SP...	B-L	Eng.	4	.....	3-Spi.	Tim.	35100	SB.	FF.	.....	RR.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	42-3	60-3 1/2	M.	Tim.	Ross.	C&L.	.....	Budd.	D-P.	Guildler	GB45
B-L-SP...	B-L	Eng.	3	4.03	3-Spi.	Tim.	56220H	SB.	FF.	6.16	Hot.	I-Fw.	H-V	400	E-Ds.	83	56-3	56-3	M.	Tim.	Ross.	C&L.	22	Budd.	6 D-P.	Indiana	16	
B-L-SP...	B-L	Eng.	4	6.30	3-Spi.	Tim.	56200H	SB.	FF.	6.16	Hot.	I-Fw.	H-V	330	E-Ds.	45	39 1/2-2 1/2	60-3	M.	Tim.	Ross.	C&L.	33	Budd.	6 D-P.	Indiana	14B	
Own-SP...	Own	Eng.	3	3.91	3-Spi.	Own.	CG	SB.	FF.	4.90°	Hot.	I-Fw.	H-V	363	E-Ds.	82	48-2 1/2	54-2 1/2	R.	Own.	Own.	.....	54	Own.	6 S-C.	Mack	CG
Own-SP...	Own	Eng.	3	3.91	2-Spi.	Own.	CQ	SB.	FF.	.....	Hot.	I-Fw.	H-V . . . .	.....	E-Ds.	.....	60-3 1/2	60-4	Own.	Own.	W&S.	63 1/2	Own.	6 S-C.	Mack	CQ	
Own-SP...	Own	Eng.	3	3.83	4-Spi.	Own.	CL	SB.	FF.	5.43°	Hot.	I-Fw.	Air.	635	E-Ds.	86	60-3 1/2	60-3 1/2	M.	Own.	Own.	W&S.	59 3/4	Own.	6 S-C.	Mack	CL	
Own-SP...	Own	Am.	4	5.15	4-Spi.	Own.	BT	DR.	FF.	4.68°	Hot.	I-Fw.	Air.	746	E-Ds.	203	56-3 1/2	70-4	R.	Own.	Ross.	C&L.	66	Own.	6 S-C.	Mack	BT	
B&B-SP...	Own	Eng.	4	6.72	3-Cle	Own. . . . .	.....	SB.	FF.	5.28	Hot.	I-Fw.	Hyd. . . .	289	E-Ds.	132	40-2 1/2	54-2 1/2	M.	Own.	Ross.	C&L.	29	Mot.	6 S-P.	Reo	21.4
Long-DP...	Own	Eng.	4	6.61	3-Cle	Own. . . . .	.....	SB.	FF.	.....	Hot.	I-Fw.	H . . . .	.....	E-Ds.	.....	44-3	60-3	Own.	Ross.	C&L.	33	Mot.	6 S-C.	Reo	31.6	
Long-DP...	Own	Eng.	4	6.60	3-Cle	Own. . . . .	.....	SB.	FF.	5.57	Hot.	I-Fw.	H-V	399	E-Ds.	88 1/2	44-3	60-3	M.	Own.	Ross.	C&L.	.....	Mot.	6 S-P.	Reo	31.8
Own-SP...	B-L	Eng.	3	4.01	4-Cle	Tim.	65401A1	Wo.	FF.	6.20	Hot.	I-Fw.	Air.	588	E-Ds.	141	60-4	60-4	Tim.	Ross.	66	Day	6	Twin Coach	40
Own-SP...	B-L	Eng.	3	4.01	3-Cle	Tim.	56010B2	SB.	FF.	6.16	Hot.	I-Fw.	Air.	588	E-Ds.	70 1/2	56-3	56-3	Tim.	Ross.	49	Day	6	Twin Coach	30
Own-SP...	B-L	Eng.	3	4.01	3-Cle	Tim.	56010A1	SB.	FF.	6.16	Hot.	I-Fw.	Air.	588	E-Ds.	70 1/2	56-3	56-3	Tim.	Ross.	56	Day	4	Twin Coach	20
Own-SP...	B-L	Eng.	3	3.33	3-Cle	Tim.	53600	SB.	FF.	5.14	Hot.	I-Fw.	H-V	310	E-Ds.	45	46-2 1/2	46-2 1/2	Tim.	Ross.	45	Day	4	Twin Coach	15
Own-SP...	B-L	Eng.	3	4.01	3-Cle	Tim.	65401A1	SB.	FF.	6.16	Hot.	I-Fw.	Air.	588	E-Ds.	70 1/2	56-3	56-3	Tim.	Ross.	60	Day	6	Twin Coach	30A
Own-SP...	B-L	Eng.	3	2.78	3-Cle	Tim.	53600C3	SB.	FF.	5.14	Hot.	I-Fw.	Air.	392	E-Ds.	45	46-2 1/2	46-2 1/2	Tim.	Ross.	45	Day	4	Twin Coach	19
Spi-SP...	Spi.	Eng.	3	2.78	3-Cle	Tim.	53520	SB.	FF.	5.14	Hot.	I-Fw.	Air. . . . .	.....	E-Ds.	.....	46-2 1/2	60-2 1/2	M.	Tim.	Ross.	C&L.	.....	Day	6 S-P.	Twin Coach	23
Spi-SP...	Spi.	Eng.	3	4.01	2-Spi.	Tim.	58200	SB.	FF.	5.9	Hot.	I-Fw.	Air.	576	E-Ds.	.....	60-4	60-4	M.	Tim.	Ross.	C&L.	.....	Budd.	6 D-P.	Twin Coach	37R
B-L-SP...	B-L	Eng.	4	5.18	.....	Tim.	58205W	SB.	FF.	6.14	Hot.	I-Fw.	Air.	570	E-Ds.	90	42-3	60-3 1/2	M.	Shu.	Ross.	C&L.	78	Budd.	6 D-P.	Ward La France	29A
B-L-DP...	B-L	Eng.	.....	4-Spi.	Tim.	59000W	SB.	FF.	4.55	Hot.	I-Fw.	Air.	696	E-Ds.	120	48-3	68-5	68-5	M.	Tim.	Ross.	C&L.	90	Budd.	10 S-P.	Ward La France	47B
Own-SP...	Own	Eng.	4	5.05	4-Spi.	Own.	1C	SB.	1/2 F.	4.56	Hot.	I-Fw.	Air.	620	I-Ds.	163	48-3	64-4	M.	Own.	Ross.	C&L.	36	Budd.	6 D-P.			

AMERICAN STOCK

MAKE AND MODEL	Designed For	Number of Cylinders, Bore and Stroke (Ins.)	Rated H.P. (N.A.C.C.)	R.P.M. at Maximum Brake H.P.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLINDERS		CRANKCASE		VALVES		FRONT END DRIVE		PISTONS			Number of Rings per Piston				
								Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On		Material	Length (Ins.)	Weight (with Pins, Rings & Bushings) Ozs.	Piston Pin Diameter and Length (Ins.)
										Integral with Cylinders-	Material												
American La France 312	T, B, Tr, M	12-4x5	76.8	240-2800	753.9	5.16	3, 4	Det.	12	Int.	ChNI	ChNI	I	ChNI	1.75	406	Chain	Al.	4.84	39.00	1.12x3.62	4	
American La France 316	T, B, Tr, M	16-4x5	102.4	320-2800	1005.0	5.5	3, 4	Det.	16	Int.	ChNI	ChNI	I	ChNI	1.75	406	Chain	Al.	4.84	39.00	1.12x3.62	4	
Automatic J51	T, Tr, Mar.	4-5 1/2 x 7	48.40	48-800	665.2	4.00	4	Int.	1	Sep.	Iron.	Iron.	L	Sil.	2.25	440	Spur.	None	CI.	7.00	100.0	1.43x4.62	4
Automatic M	T, Tr, Mar.	4-6 1/2 x 8	67.10	62-675	1061.7	4.00	4	Det.	1	Sep.	Iron.	Iron.	L	Sil.	2.50	562	Spur.	None	CI.	9.00	356.0	1.68x1.12	4
Automatic N	T, Tr, Mar.	4-7 1/2 x 9	89.80	75-540	1588.0	4.00	4	Det.	1	Sep.	Iron.	Iron.	L	Sil.	3.00	562	Spur.	None	CI.	10.50	548.0	2.00x7.12	4
Automatic R	T, Tr, Mar.	4-8 1/2 x 10	111.50	100-500	2288.0	4.00	4	Det.	1	Sep.	Iron.	Iron.	L	Sil.	3.25	687	Spur.	None	CI.	12.31	752.0	2.43x8.00	4
Buda BA-6	T, Tr, B.	6-4 1/2 x 5 1/2	40.80	83-2100	411.0	5.30	3	Det.	6	Sep.	Al.	Al.	L	Sil	2.12	312	Heli.	None	CI.	5.00	64.0	1.50x3.12	4
Buda BTU	T, Tr, B.	4-5 1/2 x 6 1/2	40.00	61-1400	510.5	5.30	3	Det.	4	Sep.	Iron.	Iron.	L	Sil	2.43	312	Heli.	None	CI.	6.75	142.0	1.37x4.37	4
Buda BUS	T, Tr, B.	6-4 1/2 x 5 1/2	38.40	79-2300	386.4	4.30	3	Det.	6	Sep.	Al.	Al.	L	Sil	2.12	312	Heli.	None	CI.	5.00	64.0	1.50x3.18	4
Buda DW-6	T, Tr, B.	6-3 1/2 x 5	22.50	73-2400	331.0	4.50	3	Det.	6	Sep.	Iron.	Iron.	L	ChN	1.96	312	Heli.	None	CI.	4.37	48.0	1.37x3.00	4
Buda ETU	T, Tr, B.	4-4 1/2 x 5 1/2	28.90	49-1900	312.0	4.05	3	Det.	4	Sep.	Iron.	Iron.	L	ChN	2.12	281	Heli.	None	CI.	5.37	81.0	1.12x1.68	4
Buda FR	T, Tr, B.	4-5 1/2 x 6 1/2	48.50	70-1300	617.7	4.10	3	Det.	4	Sep.	Iron.	Iron.	L	Sil	2.43	312	Heli.	None	CI.	6.75	144.0	1.37x4.87	4
Buda GF-6	T, Tr, B.	6-4 1/2 x 6	54.20	126-1850	638.0	4.40	3	Det.	6	Sep.	Al.	Al.	L	Sil	2.50	312	Heli.	None	CI.	6.12	94.0	1.62x4.00	4
Buda GL-6	T, Tr, B.	6-4 1/2 x 6	48.60	114-1900	572.5	4.30	3	Det.	6	Sep.	Al.	Al.	L	Sil	2.50	312	Heli.	None	CI.	6.12	93.0	1.62x3.75	4
Buda H-173	T, Tr	4-3 1/2 x 4 1/2	19.60	47-2800	173.2	4.75	3	Det.	4	Int.	Iron.	PS.	L	Sil	1.50	310	Heli.	Idler	CI.	3.75	37.0	1.12x3.00	4
Buda H-199	T, Tr	4-3 1/2 x 4 1/2	22.50	55-2800	198.8	4.75	3	Det.	4	Int.	Iron.	PS.	L	Sil	1.50	310	Heli.	Idler	CI.	3.75	42.0	1.12x3.25	4
Buda H-205	T, Tr	4-3 1/2 x 4 1/2	23.27	57-2800	205.0	4.75	3	Det.	4	Int.	Iron.	PS.	L	Sil	1.50	310	Heli.	Idler	CI.	3.75	42.0	1.12x3.22	4
Buda H-217	T, Tr	4-3 1/2 x 4 1/2	23.25	47-1800	217.0	4.75	3, 4	Det.	4	Int.	Iron.	PS.	L	Sil	1.50	310	Heli.	Idler	CI.	3.75	42.0	1.12x3.22	4
Buda H-260	T, Tr, B.	6-3 1/2 x 4 1/2	29.40	70-2800	259.5	5.25	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.50	310	Heli.	Idler	CI.	3.75	37.0	1.12x3.00	4
Buda H-298	T, Tr, B.	6-3 1/2 x 4 1/2	33.75	80-2800	298.2	5.25	3	Det.	6	Int.	Iron.	PS.	L	ChN	1.50	310	Heli.	Idler	CI.	3.75	42.0	1.12x3.25	4
Buda HS-6	C, T, B	6-3 1/2 x 4 1/2	27.30	57-2500	241.6	4.50	3	Det.	6	Sep.	Iron.	Iron.	L	ChN	1.65	310	Heli.	None	CI.	3.87	46.0	1.12x2.81	4
Buda J-214	Tr	6-3 1/2 x 4	27.34	61-3000	214.7	5.00	3	Det.	6	Sep.	Iron.	PS.	L	Sil	1.37	310	Heli.	Idler	CI.	3.75	33.0	1.00x2.87	4
Buda JH-4	Tractors	4-6 1/2 x 7 1/2	57.60	93-1200	808.0	4.28	3	Det.	2	Sep.	Iron.	Iron.	L	Sil	2.78	312	Heli.	None	CI.	6.87	196.0	1.50x5.12	4
Buda JH-6	Tractors	6-6 1/2 x 7 1/2	86.40	155-1200	1230.0	4.28	4	Det.	2	Sep.	Iron.	Iron.	L	Sil	2.78	437	Heli.	None	CI.	6.87	196.0	2.00x5.12	4
Buda JV-4	Tractors	4-5 1/2 x 7 1/2	52.90	85-1200	749.0	3.86	3	Det.	2	Sep.	Iron.	Iron.	L	Sil	2.78	312	Heli.	None	CI.	6.87	172.0	1.50x4.87	4
Buda JV-6	Tractors	6-5 1/2 x 7 1/2	79.30	142-1200	1129.5	3.88	4	Det.	2	Sep.	Iron.	Iron.	L	Sil	2.78	437	Heli.	None	CI.	6.87	172.0	2.00x4.87	4
Buda K-325	T, Tr, B.	6-3 1/2 x 4 1/2	34.80	87-2800	325.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.75	400	Heli.	None	CI.	4.37	59.5	1.25x3.22	4
Buda K-369	T, Tr, B.	6-4 1/2 x 4 1/2	39.60	99-2800	369.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.75	400	Heli.	None	CI.	4.37	63.5	1.25x3.47	4
Buda K-393	T, Tr, B.	6-4 1/2 x 4 1/2	42.07	103-2600	393.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.75	400	Heli.	None	CI.	4.37	65.5	1.25x3.47	4
Buda K-428	T, Tr, B.	6-4 1/2 x 4 1/2	45.90	107-2600	428.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.75	400	Heli.	None	CI.	4.37	68.3	1.25x3.82	4
Buda KTU	T, Tr, B.	4-4 1/2 x 5 1/2	25.60	43-2000	263.9	4.23	3	Det.	4	Sep.	Iron.	Iron.	L	ChN	1.87	280	Heli.	None	CI.	5.00	64.0	1.50x3.18	4
Buda KT-281	Tractors	4-4 1/2 x 5 1/2	27.25	50-1750	281.0	4.23	3	Det.	4	Sep.	Iron.	Iron.	L	ChN	1.87	280	Heli.	None	CI.	5.00	64.0	1.50x3.12	4
Buda L-468	T, Tr, B.	6-4 1/2 x 5 1/2	43.30	105-2400	468.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	ChN	1.75	400	Heli.	Idler	CI.	4.75	84.0	1.25x3.47	4
Buda L-525	T, Tr, B.	6-4 1/2 x 5 1/2	48.60	111-2200	525.0	4.80	3	Det.	6	Int.	Iron.	PS.	L	Sil	1.75	400	Heli.	Idler	CI.	4.75	88.0	1.25x3.94	4
Buda WTU	C, T, B, Tr.	4-3 1/2 x 5 1/2	22.50	36-1800	226.4	4.00	3	Det.	4	Sep.	Iron.	Iron.	L	Sil	1.68	280	Heli.	None	CI.	4.50	42.0	1.37x3.00	4
Buda YRC	Tractors	4-4 1/2 x 6	36.00	58-1400	425.3	3.90	3	Det.	4	Sep.	Iron.	Iron.	L	Sil	2.37	280	Heli.	None	CI.	6.12	111.0	1.43x4.11	4
Buda YTU	T, Tr, B.	4-4 1/2 x 6	32.40	50-1400	381.7	4.10	3	Det.	4	Sep.	Iron.	Iron.	L	Sil	2.37	280	Heli.	None	CI.	6.25	97.0	1.25x3.87	4
Buffalo BA	C, T, Tr	4-3 1/2 x 5	19.60	46-1800	192.4	4.00	3, 4	Det.	4	Int.	Iron.	PS.	L	CI	1.75	312	Heli.	None	CI.	3.75	48.0	1.09x3.25	3
Buffalo 4RA	T, B, Tr	4-5 1/2 x 7	55.2	120-1200	759.0	4.20	4	Det.	2	Sep.	Iron.	Iron.	I	Sil	2.62	464	Heli.	Cam.	Al.	6.62	114.5	1.5 x 5.44	5
Buffalo 6RA	T, B, Tr	6-5 1/2 x 7	82.8	200-1500	1138.5	4.20	4	Det.	2	Sep.	Iron.	Iron.	I	Sil	2.62	464	Heli.	Cam.	Al.	6.62	114.5	1.5 x 5.44	5
Buffalo 8RA	T, B, Tr	8-5 1/2 x 7	110.4	240-1200	1518.0	4.20	4	Det.	2	Sep.	Iron.	Iron.	I	Sil	2.62	464	Heli.	Cam.	Al.	6.62	114.5	1.5 x 5.44	5
Buffalo 4ATT	Tractors	4-8 1/2 x 9	109.0	180-900	1286.0	3.60	4	Det.	2	Sep.	Iron.	Iron.	L	CI	3.50	710	Heli.	Idler	Al.	9.00	373.0	2.12x7.69	5
Buffalo 6ATT	Tractors	6-8 1/2 x 9	163.3	280-900	2926.0	3.60	4	Det.	2	Sep.	Iron.	Iron.	L	CI	3.50	710	Heli.	Idler	Al.	9.00	373.0	2.12x7.69	5
Climax K & KU	Tractors	4-5 1/2 x 6 1/2	40.00	57-1200	510.4	4.20	4	Det.	2	Sep.	SS.	Iron.	L	Sil	2.25	312	Heli.	None	CI.	5.75	132.0	1.36x4.75	3
Climax T & TU	Tractors	4-5 1/2 x 7	48.50	77-1200	665.0	4.10	4	Det.	2	Sep.	SS.	Iron.	L	Sil	2.25	312	Spur.	None	CI.	7.00	168.0	1.50x5.19	4
Climax R4U	Tractors	4-6 1/2 x 7	57.6	95-1200	791.0	4.42	4	Det.	2	Sep.	SS.	Iron.	L	Sil	2.50	375	Heli.	None	CI.	6.94	220.0	1.48x3.37	4
Climax RBU	Tractors	6-5 1/2 x 7	72.5	115-1200	997.5	4.34	4	Det.	2	Sep.	SS.	Iron.	L	Sil	2.50	375	Heli.	None	CI.	6.94	168.0	1.48x3.87	4
Climax RBU	Tractors	6-5 1/2 x 7	77.3	145-1200	997.5	4.20	4	Det.	2	Sep.	SS.	Iron.	I	Sil	2.25	500	Heli.	None	CI.	6.94	168.0	1.48x3.87	4
Climax R4I	Tractors	4-6 1/2 x 7	57.6	112-1200	791.0	4.20	4	Det.	2	Sep.	SS.	Iron.	I	Sil	2.25	500	Heli.	None	CI.	6.94	216.0	1.48x3.37	4
Climax R6I	Tractors	6-6 1/2 x 7	86.4	165-1200	1187.4	4.20	4	Det.	2	Sep.	SS.	Iron.	I	Sil	2.25	500	Heli.	None	CI.	6.94	216.0	1.48x3.37	4
Climax N4B	Tractors	4-5 1/2 x 6 1/2																					

ENGINES

CONNECTING RODS				CRANKSHAFT				OILING SYSTEM		WATER CIRCULATION		GOVERNOR		MISCELLANEOUS					MAKE AND MODEL					
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Oza.	Material	Offset (Ins.)	Counterbalances Used	Crank Pin Diameter and Length (Ins.)	Main Bearings		Pressure to	Pump Type	Type	Pump Type	Furnished	Type	Maximum Governed Speed (R.P.M.)	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene	Overall Dimensions (Ins.)			Ball Housing Provided, S.A.E. Numbers		
							Number	Diameter and Length (Ins.)											Width	Height	Length			
																								Front	Rear
Car...	12.00	85.0	ChM...	None...	Yes	2.75x2.75	4	3.50x2.25	3.50x2.37	abedef	Gear.	Pump.	Cent.	Opt.	2600	1550	1980	Yes...	31 1/2	43 3/4	58 1/2	0,1,2	American La France 312	
Car...	12.00	85.0	ChM...	None...	Yes	2.75x2.75	5	3.50x2.25	3.50x2.37	abedef	Gear.	Pump.	Cent.	Opt.	2600	1550	2530	Yes...	36 1/2	43 3/4	70 1/2	0,1,2	American La France 316	
Car...	14.00	144.0	Car...	None...	No.	2.25x2.75	5	2.25x4.75	2.25x4.00	Splash	Gear.	Pump.	Cent.	Stk.	Cent.	Opt...	800	1650	Yes...	85 1/2	19 1/2	35 1/2	None...	Automatic. J5 1/2
Car...	17.00	240.0	Car...	None...	No.	2.75x3.00	5	2.75x6.75	2.75x5.00	Splash	Gear.	Pump.	Cent.	Stk.	Cent.	Opt...	675	2700	Yes...	26	43	70 1/2	None...	Automatic. M
Car...	19.00	496.0	Car...	None...	No.	3.00x3.50	5	3.00x7.00	3.00x6.00	Splash	Gear.	Pump.	Cent.	Stk.	Cent.	Opt...	560	3750	Yes...	30	48	78 1/2	None...	Automatic. N
Car...	21.00	728.0	Car...	None...	No.	3.50x4.25	5	3.50x6.50	3.50x5.12	Splash	Gear.	Pump.	Cent.	Stk.	Cent.	Opt...	500	4700	Yes...	32	53 1/2	86 1/2	None...	Automatic. R
AST...	11.25	94.0	Car...	None...	No.	2.50x2.12	4	2.50x2.12	2.50x3.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2000	1000	985	No...	25 1/2	37 1/2	49 1/2	3	Buda. BA-6
AST...	14.37	163.0	Car...	None...	No.	2.50x3.12	3	2.25x4.12	2.62x4.69	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1100	800	1409	No...	28 1/2	40 1/2	52 1/2	1	Buda. BTU
AST...	11.25	94.0	Car...	None...	No.	2.50x2.12	4	2.50x2.12	2.50x3.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2000	800	920	No...	25 1/2	37 1/2	49 1/2	3	Buda. BUS
Car...	10.75	67.0	Car...	None...	No.	2.50x1.87	4	2.50x2.62	2.50x2.87	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2000	1000	870	No...	25 1/2	30 1/2	46 1/2	3	Buda. DW-6
AST...	12.25	113.0	Car...	None...	No.	2.12x2.50	3	2.12x3.09	2.37x3.94	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1500	1050	968	No...	25 1/2	34 1/2	44 1/2	3	Buda. ETU
AST...	14.37	163.0	Car...	None...	No.	2.50x3.12	3	2.25x4.12	2.62x4.69	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1100	700	1430	No...	28 1/2	40 1/2	52 1/2	1	Buda. FR
AST...	13.25	138.0	Car...	None...	No.	3.00x2.25	4	3.00x2.25	3.00x3.69	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1650	1100	1265	No...	28 1/2	43 1/2	53 1/2	1	Buda. GF-6
AST...	13.25	138.0	Car...	None...	No.	3.00x2.25	4	3.00x2.25	3.00x3.69	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1650	1100	1265	No...	28 1/2	43 1/2	53 1/2	1	Buda. GL-6
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	515	No...	26	29 1/2	31 1/2	4	Buda. H-173
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	520	No...	26	29 1/2	31 1/2	4	Buda. H-199
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	525	No...	26	29 1/2	31 1/2	4	Buda. H-205
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	540	No...	25 1/2	31 1/2	38 1/2	4	Buda. H-217
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	7	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	660	No...	25 1/2	29 1/2	40 1/2	3, 4	Buda. H-260
Car...	9.50	42.0	Car...	None...	No.	2.12x1.62	7	3.00x1.50	3.00x2.12	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2400	1200	675	No...	25 1/2	29 1/2	40 1/2	3	Buda. H-295
Car...	9.75	48.0	Car...	None...	No.	2.37x1.75	4	2.37x1.75	2.37x2.75	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2100	1200	730	No...	25 1/2	32 1/2	44 1/2	3	Buda. HS-6
Car...	8.50	36.0	Car...	None...	No.	2.00x1.50	7	2.50x1.37	2.50x1.87	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2500	1000	560	No...	25 1/2	31 1/2	38 1/2	4	Buda. J-214
AST...	14.62	227.2	Car...	None...	No.	1.50x2.75	3	3.00x4.75	3.00x4.75	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1000	800	1925	No...	30	44 1/2	58 1/2	1	Buda. JH-4
AST...	15.25	239.0	Car...	None...	Yes	3.50x3.31	4	3.50x4.75	3.50x4.75	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1200	400	3210	No...	28 1/2	43	74 1/2	1	Buda. JH-6
AST...	14.62	227.2	Car...	None...	No.	1.50x2.75	3	3.00x4.75	3.00x4.75	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1000	750	1925	No...	30	44 1/2	58 1/2	1	Buda. JH-6
AST...	15.25	239.0	Car...	None...	Yes	3.50x3.31	4	3.50x4.75	3.50x4.75	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1200	400	3210	No...	28 1/2	43	74 1/2	1	Buda. JV-4
Car...	9.50	58.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2500	1100	900	No...	25 1/2	30 1/2	47 1/2	3	Buda. K-325
Car...	9.50	58.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2300	1100	900	No...	25 1/2	30 1/2	47 1/2	3	Buda. K-369
Car...	9.50	58.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2200	1200	900	No...	25 1/2	30 1/2	47 1/2	3	Buda. K-393
Car...	9.50	58.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2200	1200	900	No...	25 1/2	30 1/2	47 1/2	3	Buda. K-428
Car...	11.25	89.0	Car...	None...	No.	2.00x2.25	3	1.87x2.87	2.12x3.44	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1700	1000	840	No...	25 1/2	33 1/2	40 1/2	3	Buda. KTU
Car...	11.25	89.0	Car...	None...	No.	2.00x2.25	3	1.87x2.87	2.12x3.44	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1500	1000	875	No...	25 1/2	33 1/2	40 1/2	3	Buda. KT-281
Car...	11.00	66.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2100	1100	950	No...	25 1/2	33 1/2	47 1/2	3	Buda. L-468
Car...	11.00	66.0	Car...	None...	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	2000	900	950	No...	25 1/2	33 1/2	47 1/2	3	Buda. L-525
Car...	11.25	...	Car...	None...	No.	1.87x2.00	3	1.75x2.50	2.12x2.94	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1800	1000	660	No...	25 1/2	41	36 1/2	3	Buda. WTU
AST...	13.25	106.0	Car...	None...	No.	2.25x3.00	3	2.50x3.00	2.50x4.06	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1200	800	1150	No...	25 1/2	36 1/2	47 1/2	3	Buda. YTC
AST...	13.25	133.7	Car...	None...	No.	2.25x3.00	3	2.12x3.31	2.37x4.44	abedef...	Gear.	Pump.	Cent.	Opt.	Opt...	1400	850	1087	No...	25 1/2	36 1/2	47 1/2	3	Buda. YTU
AST...	10.25	34.0	Car...	None...	No.	1.87x2.17	3	2.25x2.87	2.18x3.00	abedef...	Pat.	Opt...	Gear.	Opt.	Cent.	1500	850	550	No...	25 1/2	32	40	Opt...	Buffalo. BA
AST...	14.00	136.0	ChN...	None...	No.	3.00x2.37	5	3.75x4.50	3.75x4.12	abedef...	Gear.	Opt...	Opt.	Opt.	Cent.	1200	1200	2740	No...	31 1/2	49 1/2	56 1/2	Opt...	Buffalo. 4RA
AST...	14.00	136.0	ChN...	None...	No.	3.00x2.37	7	3.75x4.50	3.75x4.12	abedef...	Gear.	Opt...	Opt.	Opt.	Cent.	1200	1500	3340	No...	31 1/2	49 1/2	73	Opt...	Buffalo. 6RA
AST...	14.00	136.0	ChN...	None...	No.	3.00x2.37	9	3.75x4.50	3.75x4.12	abedef...	Gear.	Opt...	Opt.	Opt.	Cent.	1200	1200	3940	No...	31 1/2	49 1/2	90	Opt...	Buffalo. 8RA
AST...	21.00	352.0	CS...	None...	No.	3.75x4.50	5	4.25x7.00	4.25x7.00	abedef...	Gear.	Opt...	Opt.	Opt.	Cent.	600	900	7000	No...	44 1/2	52	93	No...	Buffalo. 4ATT
AST...	21.00	352.0	CS...	None...	No.	3.75x4.50	7	4.25x7.00	4.25x7.00	abedef...	Gear.	Opt...	Opt.	Opt.	Cent.	600	900	9500	No...	48 1/2	52	118	No...	Buffalo. 6ATT
Car...	13.00	111.0	ChN...	None...	No.	2.25x3.00	3	2.19x3.25	2.31x4.37	abedef...	Ecc.	Pump.	Cent.	Stk.	Cent.	1200	700	1100	Yes...	23 1/2	39 1/2	49 1/2	2	Climax. K & KU
Car...	14.00	179.0	ChN...	None...	No.	2.50x3.50	3	2.50x3.75	2.50x4.50	abedef...	Ecc.	Pump.	Cent.	Stk.	Cent.	1200	700	1550	Yes...	26	43 1/2	55 1/2	1	Climax. T & TU
AST...	16.00	216.0	ChN...	None...	No.	3.00x3.50	3	3.25x3.66	3.25x4.50	abedef...	Ecc.	Pump.	Cent.	Stk.	Cent.	1200	700	2000	No...	31 1/2	46 1/2	57 1/2	0, 1	Climax. R4U
AST...	16.00	216.0	ChN...	Yes...	No.	3.00x3.25	4	3.25x3.66	3.25x4.50	abedef...	Ecc.	Pump.	Cent.	Stk.	Cent.	1200	700	2660	No...	29 1/2	46 1/2	73 1/2	0, 1	Climax. RBU
AST...	16.00	216.0	ChN...	Yes...	No.	3.00x3.																		

MAKE AND MODEL	Designed For	Number of Cylinders, Bore and Stroke (Ins.)	Rated H.P. (N.A.C.C.)	R.P.M. at Maximum Brake H.P.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLINDERS		CRANKCASE		VALVES		FRONT END DRIVE		PISTONS			Number of Rings per Piston				
								Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On-		Material	Length (Ins.)	Weight (with Pins, Rings & Bushings) Ozs.	Piston Pin Diameter and Length (Ins.)
										Integral with Cylinders-	Material												
Domark 6AH-309	T, B, Tr.	6-3 1/2 x 5	84-2500	309.0	4.90	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.59	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Domark 6AH-400	T, B, Tr.	6-4 1/2 x 5	110-2500	400.0	5.10	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.75	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Domark 6A-377	T, B, Tr.	6-4 x 5	104-2500	377.0	4.90	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.75	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Domark 6A-309	T, B, Tr.	6-3 1/2 x 5	84-2500	309.0	4.90	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.59	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Domark 6AH-377	T, B, Tr.	6-4 x 5	104-2500	377.0	4.90	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.75	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Domark 6A-400	T, B, Tr.	6-4 1/2 x 5	110-2500	400.0	5.10	4	Int.	1	Sep.	Iron.	Al.	I.	ChN.	1.75	.375	Heli.	Cam.	Al.	4.37	36.0	1.25x3.21	4	
Hall-Scott 147	T, Buses.	6-4 x 5	38.40	88-2200	377.0	4.90	3	Det.	6	Sep.	SS°	Al.	I.	Sil.	1.94	.312	Chain.	Al.	4.50	40.80	1.00x3.44	4	
Hall-Scott 155	T, Buses.	6-4 1/2 x 5 1/2	43.35	95-2000	468.0	4.74	3	Det.	6	Sep.	Al.	Al.	I.	Sil.	1.94	.312	Chain.	Al.	4.56	52.00	1.25x3.34	6	
Hall-Scott 160	T, Buses.	6-4 1/2 x 5 1/2	43.35	120-2400	468.0	4.42	3	Det.	6	Sep.	Al.	Al.	I.	ChN°	2.06	.343	Chain.	Al.	5.37	56.00	1.25x3.34	6	
Hall-Scott 165	T, Tr.	4-4 1/2 x 5 1/2	28.90	60-1800	312.0	4.39	3	Det.	4	Sep.	Iron.	Iron.	I.	Sil.	1.94	.312	Chain.	Al.	5.22	56.90	1.25x3.25	6	
Hall-Scott 167	T, Tr.	4-4 1/2 x 5 1/2	36.10	68-1800	390.0	4.40	3	Det.	4	Sep.	Iron.	Iron.	I.	Sil.	2.06	.312	Chain.	Al.	5.00	69.40	1.25x3.75	6	
Hall-Scott 175	Buses, T.	6-5 x 6	60.00	164-2000	707.0	4.42	3	Det.	6	Sep.	Al.	Al.	I.	ChN°	2.32	.406	Chain.	Al.	5.12	87.40	1.37x3.81	6	
Hall-Scott 180	Buses, T.	6-5 x 6	60.0	175-2200	707.0	4.40	3	Det.	6	Int.	Iron.	Al.	I.	ChN°	2.63	.500	Chain.	Al.	5.84	91.5	1.38x3.81	6	
Hall-Scott 300, 357	Rail Cars.	6-7 1/2 x 9	135.0	373-1100	2386.0	3.94	3	Det.	6	Sep.	Al.	Al.	I.	ChN°	2.51	.312	Heli.	Al.	8.25	276.0	1.25x5.94	5	
Hall-Scott 130	T, Buses.	6-4 1/2 x 5	43.35	117-2800	425.5	5.30	3	Det.	6	Int.	Iron.	Al.	I.	ChN°	2.12	.468	Chain.	Al.	5.28	.....	1.12x3.50	4	
Hall-Scott 135	T, Buses.	6-4 1/2 x 5	48.60	130-2800	477.0	5.26	3	Det.	6	Int.	Iron.	Al.	I.	ChN°	2.12	.468	Chain.	Al.	5.14	.....	1.12x3.75	5	
Hercules E	T, Tr, B, M.	4-5 1/2 x 4	40.00	74-1600	451.4	.....	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.00	.326	Heli.	None.	CI.	5.25	106.5	1.50x4.50	4
Hercules G	T, Tr, M.	4-4 1/2 x 5 1/2	36.10	62.5-1600	407.6	.....	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.00	.326	Heli.	None.	CI.	5.25	103.0	1.50x4.25	4
Hercules K	T, Tr, B, M.	4-4 1/2 x 5 1/2	28.90	54-1600	326.3	.....	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.00	.326	Heli.	None.	CI.	5.25	82.5	1.50x3.75	4
Hercules L	T, Tr, B, M.	4-4 1/2 x 5 1/2	32.40	59-1600	365.8	.....	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.00	.326	Heli.	None.	CI.	5.25	95.5	1.50x4.00	4
Hercules IX	T, Tr, B, M.	4-2 1/2 x 4	10.00	28-3200	78.5	5.20	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.25	.250	Heli.	None.	CI.	2.44	18.0	.75x2.19	3
Hercules IXA	T, Tr, B, M.	4-3 x 4	14.40	40-3200	113.0	5.50	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.25	.250	Heli.	None.	CI.	3.06	28.0	.75x2.56	3
Hercules IXB	T, Tr, B, M.	4-3 1/2 x 4	16.90	46.5-3200	133.0	5.20	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.25	.250	Heli.	None.	CI.	3.06	29.5	.75x2.81	3
Hercules HXB	T, Tr, B, M.	6-5 x 6	60.0	148-2000	707.0	4.50	3, 4	Det.	3	Sep.	Al.	PS.	L.	Sil-e.	2.12	.468	Heli.	None.	Al.	6.50	95.0	1.50x4.44	4
Hercules HXC	T, Tr, B, M.	6-5 1/2 x 6	66.2	164-2000	779.0	4.50	3, 4	Det.	3	Sep.	Al.	PS.	L.	Sil-e.	2.12	.468	Heli.	None.	Al.	6.87	105.0	1.50x4.56	4
Hercules HXD	T, Tr, B, M.	6-5 1/2 x 6	72.8	180-2000	855.0	4.50	3, 4	Det.	3	Sep.	Al.	PS.	L.	Sil-e.	2.12	.468	Heli.	None.	Al.	6.87	117.5	1.50x4.81	4
Hercules HXE	T, Tr, B, M.	6-5 1/2 x 6	79.4	198-2000	935.0	4.50	3, 4	Det.	3	Sep.	Al.	PS.	L.	Sil-e.	2.12	.468	Heli.	None.	Al.	7.25	127.5	1.50x5.06	4
Hercules JXA	T, Tr, B, M.	6-3 3/4 x 4 1/4	27.34	59.3-2800	228.0	4.70	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.50	.322	Heli.	None.	CI.	4.37	43.0	1.00x2.91	4
Hercules JXB	T, Tr, B, M.	6-3 3/4 x 4 1/4	31.54	68.2-2200	263.0	5.40	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.50	.322	Heli.	None.	CI.	4.19	48.0	1.00x3.16	4
Hercules JXC	T, Tr, B, M.	6-3 3/4 x 4 1/4	33.75	73-2800	282.0	5.35	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.50	.322	Heli.	None.	CI.	4.12	56.5	1.00x3.37	3
Hercules JXD	C, T, B, Tr.	6-4 x 4 1/4	38.4	83.5-2900	320.0	5.60	3	Det.	6	Int.	SS.	PS.	L.	Sil.	1.50	.322	Heli.	None.	Al.	.....	.....	1.00x2.56	4
Hercules OX	T, Tr, B, M.	4-4 x 5	25.60	46-2000	251.3	4.30	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.62	.326	Heli.	None.	CI.	4.87	67.5	1.37x2.37	4
Hercules OXC	T, Tr, B, M.	4-4 1/2 x 5	28.90	56-2000	283.5	4.30	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.62	.326	Heli.	None.	CI.	4.87	73.5	1.37x2.37	4
Hercules OOA	T, Tr, B, M.	4-3 3/4 x 4 1/4	19.60	34.5-2000	173.2	4.20	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.50	.326	Heli.	None.	CI.	4.31	49.0	1.00x3.12	3
Hercules OOB	T, Tr, B, M.	4-3 3/4 x 4 1/4	22.50	38-2000	198.8	4.20	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.50	.326	Heli.	None.	CI.	4.12	56.5	1.00x3.37	3
Hercules OOC	T, Tr, B, M.	4-4 x 4 1/2	25.60	41-2000	226.2	4.20	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.50	.326	Heli.	None.	CI.	4.31	56.0	1.00x3.62	3
Hercules RXB	T, Tr, B, M.	6-4 1/2 x 5 1/4	48.60	110-2200	500.9	4.95	3, 4	Det.	6	Int.	ChNI	PS.	L.	Sil-e.	1.75	.388	Heli.	None.	Al.	4.87	60.0	1.25x3.94	4
Hercules RXC	T, Tr, B, M.	6-4 1/2 x 5 1/4	51.34	114-2200	529.2	4.95	3, 4	Det.	6	Int.	ChNI	PS.	L.	Sil-e.	1.75	.388	Heli.	None.	Al.	4.87	62.0	1.25x4.06	4
Hercules TX	T, Tr, B, M.	4-5 1/2 x 7	48.40	88-1200	665.0	3.84	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.50	.375	Heli.	None.	CI.	7.00	196.5	1.87x4.87	4
Hercules TXA	T, Tr, B, M.	4-6 x 7	57.60	98-1200	792.0	3.84	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.50	.375	Heli.	None.	CI.	7.00	222.5	1.87x5.37	4
Hercules TXO	T, Tr, B, M.	4-6 1/2 x 7	65.00	112-1200	894.0	3.84	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	2.50	.375	Heli.	None.	CI.	7.00	240.0	1.87x5.75	4
Hercules WXB	T, Tr, B, M.	6-3 1/2 x 4 1/2	33.75	68.2-2400	298.0	4.70	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.62	.356	Heli.	None.	CI.	4.56	56.0	1.12x3.37	4
Hercules WXC	T, Tr, B, M.	6-4 x 4 1/2	38.40	75.5-2400	339.0	4.70	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.62	.356	Heli.	None.	CI.	4.56	64.5	1.12x3.56	4
Hercules ZXA	T, Tr, B, M.	4-2 1/2 x 3	10.00	24.8-3600	58.80	6.10	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.00	.200	.....	Al.	2.69	.....	.718x2.19	3	
Hercules ZXB	T, Tr, B, M.	4-2 1/2 x 3	11.00	22.5-3600	64.90	6.10	3, 4	Det.	4	Int.	Iron.	PS.	L.	Sil-e.	1.00	.200	.....	Al.	2.69	.....	.718x2.31	3	
Hercules WXC-2	T, Tr, B, M.	6-4 1/2 x 4 1/2	40.30	82-2400	360.8	4.70	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.62	.356	Heli.	None.	CI.	4.56	65.0	1.12x3.62	4
Hercules WXC-3	T, Tr, B, M.	6-4 1/2 x 4 1/2	43.3	91.5-2400	383.0	4.70	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.62	.356	Heli.	None.	CI.	4.56	83.0	1.12x3.69	4
Hercules YXC	T, Tr, B, M.	6-4 1/2 x 4 1/2	45.9	94-2200	428.4	4.40	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.75	.388	Heli.	None.	CI.	4.87	79.5	1.25x3.94	4
Hercules YXC-2	T, Tr, B, M.	6-4 1/2 x 4 1/2	48.6	98-2200	453.0	4.40	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.75	.388	Heli.	None.	CI.	4.87	85.0	1.25x3.94	4
Hercules YXC-3	T, Tr, B, M.	6-4 1/2 x 4 1/2	51.34	104-2200	478.8	4.40	3, 4	Det.	6	Int.	Iron.	PS.	L.	Sil-e.	1.75	.388	Heli.	None.	CI.	4.87	87.0	1.2	

ENGINES—Continued

CONNECTING RODS			CRANKSHAFT				OILING SYSTEM		WATER CIRCULATION		GOVERNOR		MISCELLANEOUS						MAKE AND MODEL					
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Oza.	Material	Offset (Ins.)	Counterbalances Used—	Crank Pin Diameter and Length (Ins.)	Main Bearings		Pressure to Pump Type	Type	Pump Type	Furnished—	Type	Maximum Governed Speed (R.P.M.)	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene—	Overall Dimensions (Ins.)			Ball Housing Provided—S.A.E. Numbers			
							Number	Front										Rear	Width	Height			Length	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1222	No.	40%	27%	44	Opt.	Domark.....6AH-369	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1247	No.	40%	27%	44	Opt.	Domark.....6AH-400	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1087	No.	24%	37%	44	Opt.	Domark.....6A-377	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1062	No.	24%	37%	44	Opt.	Domark.....6A-309	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1247	No.	40%	27%	44	Opt.	Domark.....6AH-377	
Car...	9.50	54.0	Car...	None.	Yes.	2.37x1.75	7	2.71x2.25	2.71x2.87	abodef	Gear.	Air C.	Opt.	Opt.	2400	1500	1087	No.	24%	37%	44	Opt.	Domark.....6A-400	
AST...	11.00	75.00	ChM.	None.	No.	2.25x1.44	4	2.75x2.60	2.75x2.60	abodef.	Gear.	Pump.	Cent.	Opt.	Cent.	1100	1039	No.	25%	39	50%	3	Hall-Scott.....147	
AST...	11.00	102.0	ChN.	None.	No.	2.25x2.00	4	2.75x2.19	2.75x3.19	abodef.	Gear.	Pump.	Cent.	Opt.	Cent.	2000	1000	1240	No.	34	39%	50%	3	Hall-Scott.....155
AST...	11.00	101.0	ChM.	None.	Yes.	2.38x2.00	4	2.75x2.19	2.75x3.19	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	1800	1000	1230	No.	20%	46%	55%	3	Hall-Scott.....160
AST...	11.00	105.0	ChN.	None.	No.	2.25x2.00	3	2.75x2.31	2.75x2.31	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	1800	1100	1055	Opt.	26%	40%	40%	2	Hall-Scott.....165
AST...	11.00	113.5	ChN.	None.	Yes.	2.50x2.00	7	3.00x2.31	3.00x2.44	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	1800	1100	1135	Opt.	29%	40%	49%	2	Hall-Scott.....167
AST...	11.00	103.0	ChN.	None.	Yes.	2.75x2.00	7	3.25x1.44	3.25x2.44	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	2000	1200	1273	No.	37%	43	59%	2	Hall-Scott.....175
AST...	17.00	432.0	Car.	None.	Yes.	4.12x3.00	7	4.12x4.25	4.12x6.37	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	2200	1600	1725	Yes.	42%	63%	83%	Yes	Hall-Scott.....180
AST...	11.0	.....	ChM.	None.	Yes.	2.62x1.78	7	3.00x1.47	3.00x2.28	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	1400	.....	No.	54%	18%	52%	3	Hall-Scott.....300, 357	
AST...	11.0	.....	ChM.	None.	Yes.	2.62x2.00	7	3.00x1.47	3.00x2.28	abodef.	Gear.	Pump.	Cent.	Opt.	Suet.	1000	.....	No.	54%	18%	52%	3	Hall-Scott.....130	
1035	10.87	83.0	1045	None.	No.	2.50x2.62	3	3.00x3.37	3.00x3.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	890	Yes.	21%	30%	41%	1, 2	Hercules.....E
1035	10.87	83.0	1045	None.	No.	2.50x2.62	3	3.00x3.37	3.00x3.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	885	Yes.	21%	30%	41%	1, 2	Hercules.....G
1035	10.87	83.0	1045	None.	Yes.	2.50x2.62	3	3.00x3.37	3.00x3.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	875	Yes.	21%	30%	41%	1, 2	Hercules.....K
1035	10.87	83.0	1045	None.	No.	2.50x2.62	3	3.00x3.37	3.00x3.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	880	Yes.	21%	30%	41%	1, 2	Hercules.....L
3140	6.50	1.00	1045	None.	No.	1.75x1.12	3	2.00x1.56	2.00x1.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	2000	250	Yes.	16%	18%	24%	5, 6	Hercules.....IX
3140	6.50	1.00	1045	None.	No.	1.75x1.12	3	2.00x1.56	2.00x1.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	2000	283	Yes.	16%	18%	24%	5, 6	Hercules.....IXA
3140	6.50	1.00	1045	None.	No.	1.75x1.12	3	2.00x1.56	2.00x1.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	2000	291	Yes.	16%	18%	24%	5, 6	Hercules.....IXB
3140	12.00	143.0	1045	None.	No.	3.00x2.25	7	3.50x2.75	3.50x3.50	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1600	1000	1810	Yes.	24%	40%	54%	00, 0	Hercules.....HXB
3140	12.00	143.0	1045	None.	No.	3.00x2.25	7	3.50x2.75	3.50x3.50	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1600	1000	1810	Yes.	24%	40%	54%	00, 0	Hercules.....HXC
3140	12.00	160.0	1045	None.	No.	3.00x2.25	7	3.50x2.75	3.50x3.50	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	1830	Yes.	24%	40%	54%	00, 0	Hercules.....HXD
3140	12.00	160.0	1045	None.	No.	3.00x2.25	7	3.50x2.75	3.50x3.50	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1400	1000	1830	Yes.	24%	40%	54%	00, 0	Hercules.....HXE
1035	8.00	37.5	1045	None.	No.	2.00x1.50	7	2.50x1.31	2.50x2.12	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	550	Yes.	17%	23%	37%	3, 0	Hercules.....JXA
1035	8.00	37.5	1045	None.	No.	2.00x1.50	7	2.50x1.31	2.50x2.12	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	560	Yes.	17%	23%	37%	3, 0	Hercules.....JXB
1035	8.00	37.5	1045	None.	No.	2.00x1.50	7	2.50x1.31	2.50x2.12	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	565	Yes.	17%	23%	37%	3, 0	Hercules.....JXC
Car...	8.00	.....	ChN.	None.	No.	2.00x1.50	7	2.50x1.31	2.50x2.12	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	900	.....	Yes.	17%	23%	37%	3, 4	Hercules.....JXD	
1035	9.50	58.5	1045	None.	No.	2.00x2.25	3	2.00x3.19	2.00x3.31	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1400	1000	655	Yes.	20%	28%	36%	2, 3	Hercules.....JXX
1035	9.50	58.5	1045	None.	No.	2.00x2.25	3	2.00x3.19	2.00x3.31	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1400	1000	655	Yes.	20%	28%	36%	2, 3	Hercules.....JXX
1035	8.00	37.5	1045	None.	No.	2.00x1.50	3	2.00x2.00	2.00x2.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	1200	460	Yes.	17%	23%	29%	4, 5	Hercules.....OXA
1035	8.00	37.5	1045	None.	No.	2.00x1.50	3	2.00x2.00	2.00x2.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	1000	460	Yes.	17%	23%	29%	4, 5	Hercules.....OXA
1035	8.00	37.5	1045	None.	No.	2.00x1.50	3	2.00x2.00	2.00x2.62	ab...	Gear.	Opt.	Cent.	Opt.	Cent.	1800	1000	460	Yes.	17%	23%	29%	4, 5	Hercules.....OXA
3140	9.37	81.0	1045	None.	No.	2.62x2.00	7	3.00x1.81	3.00x2.94	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	1000	Yes.	21%	31%	45%	2, 3	Hercules.....RXX
3140	9.37	81.0	1045	None.	No.	2.62x2.00	7	3.00x1.81	3.00x2.94	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	1010	Yes.	21%	31%	45%	2, 3	Hercules.....RXX
1035	13.25	178.0	1045	None.	No.	3.00x3.00	3	3.75x4.37	3.75x4.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1200	800	1800	Yes.	26%	38	52%	1, 0	Hercules.....TX
1035	13.25	178.0	1045	None.	No.	3.00x3.00	3	3.75x4.37	3.75x4.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1200	800	1815	Yes.	26%	38	52%	1, 0	Hercules.....TXA
1035	13.25	178.0	1045	None.	No.	3.00x3.00	3	3.75x4.37	3.75x4.50	ab...	Gear.	Pump.	Cent.	Opt.	Cent.	1200	800	1850	Yes.	26%	38	52%	1, 0	Hercules.....TXO
1035	9.12	51.5	1045	None.	No.	2.25x1.50	7	2.62x1.75	2.62x2.75	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	805	Yes.	21	27	41%	3	Hercules.....WXB
1035	9.12	51.5	1045	None.	No.	2.25x1.50	7	2.62x1.75	2.62x2.75	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	805	Yes.	21	27	41%	3	Hercules.....WXC
3140	5.12	.....	1045	None.	No.	1.50x1.00	3	2x1.31	2.00x1.37	ab...	Opt.	.....	.....	.....	1800	2000	.....	Yes.	14%	16%	21%	.....	Hercules.....ZXA	
3140	5.12	.....	1045	None.	No.	1.50x1.00	3	2x1.31	2.00x1.37	ab...	Opt.	.....	.....	.....	1800	2000	.....	Yes.	14%	16%	21%	.....	Hercules.....ZXB	
1035	9.12	51.5	1045	None.	No.	2.25x1.50	7	2.62x1.75	2.62x2.75	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	810	Yes.	21	27	41%	3	Hercules.....WXC-2
1035	9.12	51.5	1045	None.	No.	2.25x1.50	7	2.62x1.75	2.62x2.75	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	1000	820	Yes.	21	27	41%	3	Hercules.....WXC-3
1035	9.62	64.5	1045	None.	No.	2.50x1.75	7	3.00x2.00	3.00x3.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	800	975	Yes.	21%	31%	45%	2, 3	Hercules.....YXC
1035	9.62	64.5	1045	None.	No.	2.50x1.75	7	3.00x2.00	3.00x3.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	800	975	Yes.	21%	31%	45%	2, 3	Hercules.....YXC-2
1035	9.62	64.5	1045	None.	No.	2.50x1.75	7	3.00x2.00	3.00x3.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	1800	800	975	Yes.	21%	31%	45%	2, 3	Hercules.....YXC-3
Car...	9.00	54.40	Steel.	None.	No.	2.34x1.69	5	2.62x2.10	2.62x2.75	abode.	Gear.	Pump.	Cent.	Stk.	Cent.	2800	1200	1120	No.	25%	34%	52%	2	Lycoming.....AEF
Car...	9.00	41.60																						

AMERICAN STOCK

MAKE AND MODEL	Designed For	Number of Cylinders, Bore and Stroke (Ins.)	Rated H.P. (N.A.C.C.)	R.P.M. at Maximum Brake H.P.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLIN- DERS		CRANKCASE		VALVES			FRONT END DRIVE		PISTONS			Number of Rings per Piston			
								Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On-	Material		Length (Ins.)	Weight (with Pins, Rings & Bushings) Ozs.	Piston Pin Diameter and Length (Ins.)
										Integral with Cylinders-	Material												
Waukesha	4-80 Ind., Tractors.	4-5 1/2 x 6 1/2	48.50	80-	618.0	3	Det.	4	Sep.			F	Sil.	2.50		Heli.	None.	CI.		1.37x3.37	4		
Waukesha	4-95 Ind., Tractors.	4-6 x 6 1/2	57.50	95-	735.0	3	Det.	4	Sep.	Iron.	Iron.	F	Sil.	2.50		Heli.	None.	CI.		1.37x3.87	4		
Waukesha	JL Tractors.	4-6 x 7	57.60		792.0	3	Det.	2	Sep.	Iron.	Iron.					Heli.	None.	CI.		1.62x3.12	4		
Waukesha	JK Tractors.	4-6 1/2 x 7	67.60		929.0	3	Det.	2	Sep.	Iron.	Iron.					Heli.	None.	CI.		1.62x3.12	4		
Waukesha	JZ Ind., Tractors.	4-6 1/2 x 7	73.00	105-1050	1002.	3	Det.	2	Sep.	Iron.	Iron.	L	Sil.	2.50		Heli.	None.	CI.		1.62x3.12	4		
Waukesha	WL	4-6 1/2 x 8	62.50		982.0	3, 4	Det.	2	Sep.	Iron.	Iron.	L				Heli.	None.	CI.		1.62x	4		
Waukesha	WK	4-6 1/2 x 8	73.00		1145	3, 4	Det.	2	Sep.	Iron.	Iron.	L				Heli.	None.	CI.		1.62x	4		
Waukesha	WOK Ind.	4-7 1/2 x 8	90.0	162-	1414.0	3, 4	Det.	4	Sep.	Iron.	Iron.	I				Heli.	None.	CI.		2.00x6.56	4		
Waukesha	6BA T. B. Ind.	6-3 3/4 x 4 1/4	27.25	63.8-2600	228.0	3	Det.	6	Int.	Iron.	PS.	L				Heli.	None.	CI.		1.00x2.19	4		
Waukesha	6BL T. B. Tr. Ind.	6-3 3/4 x 4 1/4	29.40	72-	245.0	3	Det.	6	Int.	Iron.	Al.	L	Sil.	1.50+		Heli.	None.	Al.		1.00x2.87	4		
Waukesha	6BK T. B. Tr. Ind.	6-3 3/4 x 4 1/4	33.70	84-	282.0	3	Det.	6	Int.	Iron.	Al.	L	Sil.	1.50+		Heli.	None.	Al.		1.00x2.87	4		
Waukesha	6MS T. B. Tr.	6-3 3/4 x 4 1/4	33.70		315.0	3	Det.	6	Int.	Iron.	PS.	L				Heli.	None.	CI.			4		
Waukesha	6ML T. B. Tr.	6-4 x 4 1/4	38.50		358.0	3	Det.	6	Int.	Iron.	PS.	L				Heli.	None.	CI.			4		
Waukesha	6MK T. B. Tr.	6-4 1/2 x 4 1/4	40.80		381.0	3	Det.	6	Int.	Iron.	PS.	L				Heli.	None.	CI.			4		
Waukesha	6MZ T. B. Tr.	6-4 1/2 x 4 1/4	43.50	80-	404.0	3	Det.	6	Int.	Iron.	PS.	L	Sil.	1.62+		Heli.	None.	CI.		1.00x4.00	4		
Waukesha	6-110 T. B. Tr. Ind.	6-4 x 4 1/4	38.50		358.0	3	Det.	6	Int.	Iron.	Al.	F	ChN°			Heli.	None.	Al.		1.00x	4		
Waukesha	6SRS T. B.	6-4 1/2 x 5 1/2	40.84		411.0	3	Det.	6	Sep.	Iron.	PS.	L				Heli.	None.	Al.					
Waukesha	6SRL T. B.	6-4 1/2 x 5 1/2	46.00		464.0	3	Det.	6	Sep.	Iron.	PS.	L				Heli.	None.	CI.		1.00x2.25			
Waukesha	6SRK T. B. Tr.	6-4 x 5 1/2	51.34		517.0	3	Det.	6	Int.	Iron.	PS.	L				Heli.	None.	Al.		1.37x			
Waukesha	6-125 T. B. Tr. Ind.	6-4 1/2 x 5 1/2	46.00		464.0	3	Det.	6	Sep.	Iron.	PS.	F	ChN°			Heli.	None.	Al.		1.00x	4		
Waukesha	6AB T. Buses.	6-4 1/2 x 5 1/2	48.60		549.0	3	Det.	2	Sep.	Al.	Al.	L				Heli.	None.	CI.					
Waukesha	6RB T. Buses.	6-5 x 5 1/2	60.00		677.0	3	Det.	2	Sep.	Al.	Al.	L				Heli.	None.	Al.		1.38x2.93			
Waukesha	6LS Rail Car.	6-7 x 8 1/2	104.0		1962.0	4	Det.	1	Sep.	Iron.	Iron.	L				Heli.	None.	Al.		2.25x3.75			
Waukesha	6LK Rail Car.	6-7 1/2 x 8 1/2	144.0		2410.0	4	Det.	1	Sep.	Iron.	Iron.	L				Heli.	None.	Al.		2.25x4.25			
Waukesha	6LRO Rail Car. Ind.	6-8 1/2 x 8 1/2	173.0	350-	2894.0	4	Det.	3	Sep.	Iron.	Iron.	I		3.25+		Heli.	None.	CI.		2.25x7.75	5		
Wisconsin	AC4 T. Tr. Ind.	4-2 1/2 x 3 1/4	11.0	15-2800	70.4	4.50	4	Det.	4	Sep.	Al.	Al.	I	Sil.	.937	.232	Heli.	None.	Al.	3.00	21	75x2.06	3
Wisconsin	SU T. Tr. B.	4-4 x 5	25.60	50-2000	251.3	4.20	3	Det.	4	Int.	Iron.	PS.	I	Sil.	1.53	.380	Heli.	Idler.	CI.	4.25	55.0	1.06x3.47	4
Wisconsin	W Tr. Ind.	4-4 1/2 x 5	27.23	49-1600	267.0	4.20	3	Det.	4	Int.	Iron.	PS.	I	Sil.	1.53	.380	Heli.	Idler.	CI.	4.25	58.0	1.06x3.47	3
Wisconsin	X Tr. T.	4-4 1/2 x 5	32.4	66-1800	318	4.25	3	Det.	4	Int.	Iron.	Iron.	I	Sil.	1.81	.387	Heli.	Idler.	CI.	4.75	91.0	1.187x3.93	4
Wisconsin	N T. Tr. Ind.	6-3 1/2 x 4 1/4	29.39	55-2500	245	4.60	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.50	.380	Heli.	Cam.	CI.	4.00	59.0	1.06x2.85	3
Wisconsin	GA-1 T. Buses, Tr.	6-3 1/2 x 5	31.54	65-2000	309	4.54	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.50	.380	Heli.	Idler.	CI.	4.00	50.0	1.06x3.10	3
Wisconsin	GA-2 T. Tr. B.	6-3 1/2 x 5	33.75	67-2100	331	3.54	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.50	.380	Heli.	Idler.	CI.	3.90	51.0	1.06x3.10	3
Wisconsin	L-2 T. Tr. B.	6-3 1/2 x 5	36.00	80-2200	354	4.30	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.75	.380	Heli.	Idler.	CI.	4.87	48.0	1.25x3.15	3
Wisconsin	L-3 T. Tr. B.	6-4 1/2 x 5	40.80	85-2000	401	4.30	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.75	.380	Heli.	Idler.	CI.	4.72	52.0	1.25x3.40	3
Wisconsin	L-4 T. Buses, Tr.	6-4 1/2 x 5	43.3	85-1800	426.0	4.30	3	Det.	6	Int.	Iron.	Iron.	I	Sil.	1.75	.38	Heli.	Idler.	CI.	4.62	56	1.25x3.40	3
Wisconsin	ZA-1 T. Tr. B.	6-4 1/2 x 5	48.60	108-2000	477	4.70	3	Det.	6	Sep.	SS.	Iron°	I	Sil.	1.81	.450	Heli.	Idler.	CI.	4.75	88.0	1.19x3.93	5
Wisconsin	ZA-2 T. Tr. B.	6-4 1/2 x 5	51.34	112-2000	504	4.70	3	Det.	6	Sep.	SS.	Iron.	I	Sil.	1.81	.450	Heli.	Idler.	CI.	4.65	94.0	1.19x3.93	4

ABBREVIATIONS:

a—Main Bearings.
Accx—Accessories Drive
Air C—Air Cooled
Al—Aluminum Alloy
Als—Aluminum Steel with Strut

AS—Composite Aluminum and Alloy
Steel Strut
Ast—Alloy Steel
B—Connecting Rod Bearings
B—Buses
c—Camshaft Bearings
C—Cars

Cam—Camshaft
Car—Carbon Steel
Cent—Centrifugal
ChM—Chrome Molybdenum
ChN—Chrome Nickel Steel
Ch—Chromium Steel
ChNi—Chrome Nickel Iron

ChVa—Chrome Vanadium
CI—Cast Iron
Cran—Crankshaft
d—Wrist Pins
Det—Detachable
Dur—Duralumin
e—(Oiling System)—Timing Gear Case

e—Exhaust
Ecc—Eccentric
f—Rocker Arm
Flo—Floating
Heli—Helical
I—Both valves in head
Ind—Industrial

AMERICAN MARINE

MAKE AND MODEL	Number of Cylinders, Bore and Stroke (Ins.)	Maximum Brake H.P. at Specified R.P.M.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLIN- DERS		CRANKCASE			VALVES			FRONT END DRIVE		PISTONS				Number of Rings per Piston		
						Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On	Material	Length (Ins.)	Weight (with Pins Rings & Bushings) Ozs.		Piston Pin Diameter and Length (Ins.)	
								Integral with Cylinders	Material													
Alfco	312-M	12-4x5	240-2800	754.0	5.16	4	Det.	12	Int.	Iron...	Iron...	I...	Sil...	1.75	.41	Chain.		Al...	4.84	39	1.12x3.62	4
Alfco	316-M	16-4x5	320-2800	1005.0	5.5	4	Det.	16	Int.	Iron...	Iron...	I...	Sil...	1.75	.41	Chain.		Al...	4.84	39	1.12x3.62	4
Bridgeport	F-10	2-3 1/2 x 4 1/2	12-1200	198.0		4	Det.	2	Int.	Iron...	Iron...	I...	NicS...	1.50		Heli.	None.	CI...			1.00x3.62	4
Bridgeport	Pilot	4-4x5	45-1800	251.3		4	Det.	4	Int.	Iron...	Iron...	L...	Sil...	1.62		Heli.	None.	CI...	4.87		1.37x3.87	4
Bridgeport	304	4-5 1/2 x 6 1/2	45-700	617.0		4	Det.	1	Sep.	Iron...	Iron...	L...	CI...	2.25		Heli.	None.	CI...	7.00		1.25x5.37	5
Bridgeport	404	4-6 1/2 x 7 1/2	65-600	995.0		4	Det.	1	Sep.	Iron...	Iron...	L...	CI...	2.25		Heli.	None.	CI...	8.50		1.50x6.37	5
Buda	HM-173	4-3 1/2 x 4 1/2	48-2800	173.2	5.25	4	Det.	4	Int.	Iron...	Iron...	L...	Sil°	1.50+	.310	Heli.	Idler.	CI...	3.75	37.0	1.12x3.00	4
Buda	HM-199	4-3 1/2 x 4 1/2	55-2800	198.8	5.25	4	Det.	4	Int.	Iron...	Iron...	L...	Sil°	1.50+	.310	Heli.	Idler.	CI...	3.75	42.0	1.12x3.25	4
Buda	HM-205	4-3 1/2 x 4 1/2	57-2800	205.0	5.30	4	Det.	4	Int.	Iron...	Iron...	L...	ChN°	1.50+	.310	Heli.	Idler.	CI...	3.75	42.0	1.12x3.22	4
Buda	HM-298	6-3 1/2 x 4 1/2	81-2800	298.2	5.25	4	Det.	6	Int.	Iron...	Iron...	L...	Sil°	1.50+	.310	Heli.	Idler.	CI...	3.75	42.0	1.12x3.25	4
Buda	HM-260	6-3 1/2 x 4 1/2	70-2800	259.9	5.25	4	Det.	6	Int.	Iron...	Iron...	L...	Sil°	1.50+	.310	Heli.	Idler.	CI...	3.75	37.0	1.12x3.00	4
Buda	KM-369	6-4 1/2 x 4 1/2	97-2600	369.0	5.30	4	Det.	6	Int.	Iron...	Iron...	L...	Sil°	1.75+	.400	Heli.	Idler.	CI...	4.37	63.5	1.25x3.47	4
Buda	KM-393	6-4 1/2 x 4 1/2	101-2400	393.0	5.30	4	Det.	6	Int.	Iron...	Iron...	L...	Sil°	1.75+	.400	Heli.	Idler.	CI...	4.37	65.5	1.25x3.47	4
Buda	KM-423	6-4 1/2 x 4 1/2	105-2400	423.0	5.30	4	Det.	6	Int.	Iron...	Iron...	L...	Sil°	1.75+	.400	Heli.	Idler.	CI...	4.37	68.3	1.25x3.82	4

ENGINES—Continued

CONNECTING RODS			CRANKSHAFT					OILING SYSTEM		WATER CIRCULATION		GOVERNOR		MISCELLANEOUS							MAKE AND MODEL			
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Ozs.	Material	Offset (Ins.)	Counterbalances Used	Crank Pin Diameter and Length (Ins.)	Main Bearings		Pressure to	Pump Type	Type	Pump Type	Furnished	Type	Maximum Governed Speed (R.P.M.)	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene	Overall Dimensions (Ins.)			Ball Housing Provided S.A.E. Numbers		
							Number	Front											Rear	Width			Height	Length
Car...	13.25	Car...	No.	2.75x2.50	3	3.00x3.00	3.00x3.62	abcef.	Gear.	Pump.	Cent.	Stk.	Cent.	1200	700	1700	Yes.	27 1/4	51 1/4	47 1/2	1, 0	Waukesha	4-80	
Car...	13.25	Car...	No.	2.75x2.50	3	3.00x3.00	3.00x3.62	abcef.	Gear.	Pump.	Cent.	Stk.	Cent.	1200	650	1750	Yes.	27 1/4	51 1/4	47 1/2	1, 0	Waukesha	4-95	
Car...	15.37	Car...	No.	3.25x2.75	3	3.75x3.25	3.75x4.25	abce.	Gear.	Pump.	Cent.	Stk.	Cent.			2195	39 1/2	47	52 1/2	0	Waukesha	JL		
Car...	15.37	Car...	No.	3.25x2.75	3	3.75x3.25	3.75x4.25	abce.	Gear.	Pump.	Cent.	Stk.	Cent.			2220	39 1/2	47	52 1/2	0	Waukesha	JK		
Car...	15.37	Car...	No.	3.25x2.75	3	3.75x3.25	3.75x4.25	abce.	Gear.	Pump.	Cent.	Stk.	Cent.		600	2225	Yes.	30 1/2	47	51 1/2	1, 0	Waukesha	JZ	
Car...	18.00	Car...	None.	3.25x2.75	5	3.75x3.75	3.75x5.50	abce.	Gear.	Pump.	Cent.	Stk.	Cent.			2750	34	51 1/2	50 1/2	0, 00	Waukesha	WL		
Car...	18.00	Car...	None.	3.25x2.75	5	3.75x3.75	3.75x5.50	abce.	Gear.	Pump.	Cent.	Stk.	Cent.			2750	34	51 1/2	50 1/2	0, 00	Waukesha	WK		
Car...	18.0	Car...	None.	3.25x2.75	5	3.75x3.75	3.75x5.50	abce.	Gear.	Pump.	Cent.	Stk.	Cent.	1050	600	3560		28	63 1/2	57 1/2	0, 00	Waukesha	WOK	
Car...	8.0	Car...	No.	2.00x1.50	7	2.62x1.25	2.62x2.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	2800	1200	675	Yes.	26	31	39 1/2	4	Waukesha	6BA	
Car...	8.00	Car...	No.	2.00x1.50	7	2.62x1.25	2.62x2.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	2800	1150	675	No.	26	31	39 1/2	4	Waukesha	6BL	
Car...	8.00	Car...	No.	2.00x1.50	7	2.62x1.25	2.62x2.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.	2800	1100	690	No.	26	31	39 1/2	4	Waukesha	6BK	
Car...	8.75	Car...	No.	2.25x1.50	7	2.62x1.62	2.62x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.			860	20 1/2	31	43 1/2	3, 2	Waukesha	6MS		
Car...	8.75	Car...	No.	2.25x1.50	7	2.62x1.62	2.62x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.			875	20 1/2	31	43 1/2	3, 2	Waukesha	6ML		
Car...	8.75	Car...	No.	2.25x1.50	7	2.62x1.62	2.62x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.			890	20 1/2	31	43 1/2	3, 2	Waukesha	6MK		
Car...	8.75	Car...	No.	2.25x1.50	7	2.62x1.62	2.62x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.	1850	800	920	Yes.	22	26	43 1/2	3	Waukesha	6MZ	
Car...	8.75	Car...	None.	2.25x1.50	7	2.87x1.62	2.87x2.75	abode.	Gear.	Pump.	Cent.	Opt.	Cent.			1125	Yes.	26	38 1/2	50 1/2	3°	Waukesha	6-110	
Car...	10.25	Car...	No.	2.75x1.75	7	3.00x1.81	3.00x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.			1150	No.	26	34 1/2	46 1/2	3	Waukesha	6SRS	
Car...	10.25	Car...	No.	2.75x1.75	7	3.00x1.88	3.00x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.				No.	26	34 1/2	46 1/2	3°	Waukesha	6SRL	
Car...	10.25	Car...	None.	2.75x1.75	7	3.00x1.81	3.00x1.50	abode.	Gear.	Pump.	Cent.	Opt.	Cent.			1130	No.	26	35 1/2	46 1/2	3, 2	Waukesha	6SRK	
Car...	10.25	Car...	None.	2.75x1.75	7	3.00x1.88	3.00x3.00	abode.	Gear.	Pump.	Cent.	Opt.	Cent.			1425	Yes.	27	42 1/2	61 1/2	3°	Waukesha	6-125	
Car...	13.25	ChN.	None.	2.75x2.50	4	3.50x2.63	3.50x3.50	abce.	Gear.	Pump.	Cent.	Opt.	Cent.	1600	750	1300	No.	26	41 1/2	54 1/2	2	Waukesha	6AB	
Car...	13.25	ChN.	None.	2.75x2.50	4	3.50x2.50	3.00x3.50	abce.	Gear.	Pump.	Cent.	Opt.	Cent.			1250	26	41 1/2	54 1/2	2	Waukesha	6RB		
Car...	18.38	Car...	No.	4.00x3.75	7	4.50x5.00	4.25x5.50	abce°	Gear.	Pump.	Cent.	Stk.	Cent.			7300	Yes.	42	60	95 1/2	0	Waukesha	6LS	
Car...	18.38	Car...	No.	4.00x3.75	7	4.25x5.00	4.25x5.50	abce°	Gear.	Pump.	Cent.	Stk.	Cent.			7335	Yes.	42	60	95 1/2	00	Waukesha	6LK	
Car...	18.75	Car...	No.	4.00x3.75	7	4.25x4.81	4.25x5.50	abce.	Gear.	Pump.	Cent.	Stk.	Cent.	1100	700	7800		37 1/2	63 1/2	93 1/2	Opt.	Waukesha	6LRO	
Car...	8.37	Car...	None.	Yes.	1.50x1.12	2	1.94x2.50	2.06x3.00	abce.	Gear.	Air C.	Air C	Opt.	Cent.		1200	250	No.	26	34	35 1/2	6°	Wisconsin	AC4
Car...	10.50	Car...	None.	No.	2.00x2.00	3	2.37x2.50	2.37x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		1000	615	No.	26	34	35 1/2	3°	Wisconsin	SU
Car...	10.50	Car...	None.	No.	2.37x2.00	3	2.75x3.00	2.75x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		900	640	No.	26	34	35 1/2	3°	Wisconsin	W
Car...	9.0	Car...	None.	No.	2.75x2.50	3	2.75x3.00	2.75x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		1000	850	No.	26	36	46	2°	Wisconsin	X
Car...	10.5	Car...	None.	No.	2.25x1.75	4	2.25x2.50	2.25x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	820	No.	26	30	45 1/2	3°	Wisconsin	N
Car...	10.5	Car...	None.	Yes.	2.50x1.75	4	2.50x2.50	2.50x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	965	Opt.	25 1/2	34	47 1/2	3°	Wisconsin	GA-1
Car...	10.5	Car...	None.	Yes.	2.50x1.75	4	2.50x2.50	2.50x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	975	Opt.	25 1/2	34	48	2°	Wisconsin	GA-2
Car...	10.5	Car...	None.	Yes.	2.62x1.75	4	2.75x2.25	2.75x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	1075	No.	25 1/2	35 1/2	47 1/2	3°	Wisconsin	L-2
Car...	10.5	Car...	None.	Yes.	2.62x1.75	4	2.75x2.25	2.75x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	1095	No.	25 1/2	35 1/2	47 1/2	3°	Wisconsin	L-3
Car...	10.50	Car...	None.	Yes.	2.62x1.75	4	2.75x2.25	2.75x2.75	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		700	1110	No.	25 1/2	35 1/2	47 1/2	3°	Wisconsin	L-4
Car...	10.5	Car...	None.	Yes.	2.75x2.50	4	2.75x3.00	2.75x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		800	1160	Opt.	26	34 1/2	52 1/2	2°	Wisconsin	ZA-1
Car...	10.5	Car...	None.	Yes.	2.75x2.50	4	2.75x3.00	2.75x3.00	abce.	Gear.	Pump.	Cent.	Opt.	Cent.		800	1160	Opt.	26	34 1/2	52 1/2	2°	Wisconsin	ZA-2
Int—Integral I°—Valve in Head; overhead camshaft L—Valves at side. ("L" head).			NicS—Nickel Steel NP—No provision Opt—Optional Plng—Plunger PS—Pressed Steel Pist—Piston			S—Rail Cars Rep—Separate Sil—Silichrome Steel SI—Sleeve Spec—Special SS—Semi Steel			Stk—Standard Equipment Suct—Suction T—Trucks TIS—Thermo-siphon Tr—Tractors Tun—Tungsten			Var—Various °—Optional °—Others also †—Inlet valve only 1—Red Wing Motor Co. 2—Super Charged												

Int—Integral
 lo—Valve in Head; overhead camshaft
 L—Valves at side, ("L" head).
 Mag—Magnesium
 Nich—Nichrome
 Nicl—Nickel Iron

NicS—Nickel Steel
 NP—No provision
 Opt—Optional
 Plng—Plunger
 PS—Pressed Steel
 Pist—Piston

S—Rail Cars
 Rep—Separate
 Sil—Silichrome Steel
 Sl—Sleeve
 Spec—Special
 SS—Semi Steel

Stk—Standard Equipment
 Suct—Suction
 T—Trucks
 ThS—Thermo-siphon
 Tr—Tractors
 Tun—Tungsten

Var—Various
 °—Optional
 °—Others also
 †—Inlet valve only
 †—Red Wing Motor Co.
 2—Super Charged

ENGINES

CONNECTING RODS			CRANKSHAFT						OILING SYSTEM		WATER CIRCULATION		MISCELLANEOUS							MAKE AND MODEL	
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Ozs.	Material	Offset (Ins.)	Counterbalances Used	Crank Pin Diameter and Length (Ins.)	Main Bearings		Pressure to	Pump Type	Type	Pump Type	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene	Overall Dimensions (Ins.)					
							Front	Rear								Width	Height	Length			
Car...	12	23	ChNM.	None	Yes.	2.75x2.75	4	3.50x2.25	3.50x2.37	abede.	Gear.	Pump...	Gear.	1550	2450	Yes...	35 1/4	41 1/4	73	Alice.....	312-M
Car...	12	33	ChNM.	None	Yes.	2.75x2.75	5	3.50x2.25	3.50x2.37	abede.	Gear.	Pump...	Gear.	1600	2910	Yes...	35 1/4	41 1/4	85	Alice.....	316-M
AST.			NicS.	None	Yes.	1.50x	2	1.50x3.00	1.50x3.00	ab.	Pist.	Pump...	Gear.	320	No		17	28 1/2	53 1/2	Bridgeport	F-10
AST.			NicS.	None	Yes.	2.00x2.25	3	2.00x3.00	2.00x3.31	ab.	Gear.	Pump...	Gear.	950	No		17	28 1/2	53 1/2	Bridgeport	Pilot
Car...			NicS.	None	No.	2.00x3.00	5	2.00x5.50	2.00x5.50	ML.		Pump...	Ping.	1700	Yes		19 1/2	31	72	Bridgeport	304
AST.			NicS.	None	No.	2.62x3.00	5	2.62x6.00	2.62x6.00	ML.		Pump...	Ping.	2450	Yes		20 1/2	35	83 1/2	Bridgeport	404
Car...	9.50	42.0	Car...	None	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abede.	Gear.	Pump...	Gear.	1200	700	No.	23 1/4	27 1/2	43 1/2	Buda.....	HM-173
Car...	9.50	42.0	Car...	None	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abede.	Gear.	Pump...	Gear.	1200	710	No.	23 1/4	27 1/2	43 1/2	Buda.....	HM-199
Car...	9.50	42.0	Car...	None	No.	2.12x1.62	5	3.00x1.50	3.00x2.12	abede.	Gear.	Pump...	Gear.	1200	715	No.	23 1/4	27 1/2	43 1/2	Buda.....	HM-205
Car...	9.50	42.0	Car...	None	No.	2.12x1.62	7	3.00x1.50	3.00x2.12	abede.	Gear.	Pump...	Gear.	1200	890	No.	22 1/2	28 1/2	54 1/2	Buda.....	HM-208
Car...	9.50	42.0	Car...	None	No.	2.12x1.62	7	3.00x1.50	3.00x2.12	abede.	Gear.	Pump...	Gear.	1200	880	No.	22 1/2	28 1/2	54 1/2	Buda.....	HM-260
Car...	9.50	58.0	Car...	None	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abede.	Gear.	Pump...	Gear.	1100	1250	No.	24 1/2	29 1/2	60 1/2	Buda.....	KM-369
Car...	9.50	58.0	Car...	None	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abede.	Gear.	Pump...	Gear.	1200	1260	No.	24 1/2	29 1/2	60 1/2	Buda.....	KM-393
Car...	9.50	58.0	Car...	None	No.	2.37x1.75	7	3.00x1.75	3.00x2.50	abede.	Gear.	Pump...	Gear.	1200	1300	No.	24 1/2	29 1/2	60 1/2	Buda.....	KM-428

AMERICAN MARINE

MAKE AND MODEL	Number of Cylinders Bore and Stroke (Ins.)	Maximum Brake H.P. at Specified R.P.M.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLIN- DERS		CRANKCASE		VALVES			FRONT END DRIVE		PISTONS			Number of Rings per Piston			
						Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On	Material		Length (Ins.)	Weight (with Pins Rings & Bushings) Ozs.	Piston Pin Diameter and Length (Ins.)
								Integral with Cylinders	Material												
Buda.....LM-468	6-4 1/2 x 5 1/2	111-2400	468.0	5.20	4	Det...	6	Int...	Iron	Iron	L...	ChN°	1.75	.400	Heli...	Idler...	CI...	4.75	84.0	1.25x3.47	4
Buda.....LM-525	6-4 1/2 x 5 1/2	121-2200	525.0	5.20	4	Det...	6	Int...	Iron	Iron	L...	ChN°	1.75	.400	Heli...	Idler...	CI...	4.75	88.0	1.25x3.94	4
Buda.....GM-572	6-4 1/2 x 6	110-2000	572.5	4.60	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.25	.312	Heli...	Idler...	CI...	6.12	93.0	1.62x3.75	4
Buda.....GM-638	6-4 1/2 x 6	126-2000	638.0	4.86	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.25	.312	Heli...	Idler...	CI...	6.12	94.0	1.62x4.00	4
Buda.....HM-173-R	4-3 1/2 x 4 1/2	48-2800	173.2	5.25	4	Det...	4	Int...	Iron	Iron	L...	Si°	1.50	.310	Heli...	Idler...	CI...	3.75	37.0	1.12x3.00	4
Buda.....HM-199-R	4-3 1/2 x 4 1/2	55-2800	198.8	5.25	4	Det...	4	Int...	Iron	Iron	L...	Si°	1.50	.310	Heli...	Idler...	CI...	3.75	42.0	1.12x3.25	4
Buda.....HM-205-R	4-3 1/2 x 4 1/2	57-2800	205.0	5.30	4	Det...	4	Int...	Iron	Iron	L...	Si°	1.50	.310	Heli...	Idler...	CI...	3.75	42.0	1.12x3.22	4
Buda.....HM-260-R	6-3 1/2 x 4 1/2	70-2800	259.9	5.25	4	Det...	6	Int...	Iron	Iron	L...	Si°	1.50	.310	Heli...	Idler...	CI...	3.75	37.0	1.12x3.00	4
Buda.....HM-298-R	6-3 1/2 x 4 1/2	81-2800	298.2	5.25	4	Det...	6	Int...	Iron	Iron	L...	Si°	1.50	.310	Heli...	Idler...	CI...	3.75	42.0	1.12x3.25	4
Buda.....KM-369-R	6-4 1/2 x 4 1/2	97-2600	369.0	5.30	4	Det...	6	Int...	Iron	Iron	L...	ChN°	1.75	.400	Heli...	Idler...	CI...	4.37	63.5	1.25x3.47	4
Buda.....KM-393-R	6-4 1/2 x 4 1/2	101-2400	393.0	5.30	4	Det...	6	Int...	Iron	Iron	L...	ChN°	1.75	.400	Heli...	Idler...	CI...	4.37	65.5	1.25x3.47	4
Buda.....KM-428-R	6-4 1/2 x 4 1/2	105-2400	428.0	5.30	4	Det...	6	Int...	Iron	Iron	L...	Si°	1.75	.400	Heli...	Idler...	CI...	4.37	68.2	1.25x3.82	4
Buda.....LM-468-R	6-4 1/2 x 5 1/2	111-2400	468.0	5.20	4	Det...	6	Int...	Iron	Iron	L...	Si°	1.75	.400	Heli...	Idler...	CI...	4.75	84.0	1.25x3.47	4
Buda.....LM-525-R	6-4 1/2 x 5 1/2	121-2200	525.0	5.20	4	Det...	6	Int...	Iron	Iron	L...	Si°	1.75	.400	Heli...	Idler...	CI...	4.75	88.0	1.25x3.94	4
Buda.....GM-638-R	6-4 1/2 x 6	126-2000	638.0	4.86	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.25	.312	Heli...	Idler...	CI...	6.12	94.0	1.62x4.00	4
Buda.....GM-572-R	6-4 1/2 x 6	110-2000	572.5	4.60	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.25	.312	Heli...	Idler...	CI...	6.12	93.0	1.62x3.75	4
Buffalo.....BA	4-3 1/2 x 5	46-1800	192.4	4.0	3.4	Det...	4	Int...	Iron	PS	L...	CI	1.75	.312	Heli...	None	CI	3.75	48.0	1.09x3.25	3
Buffalo.....6-ATT	6-7 1/2 x 9	240-900	2547.3	3.60	4	Det...	2	Sep...	Iron	Iron	L...	CI	3.50	.710	Heli...	Idler...	AI	9.00	345.0	2.00x7.19	4
Buffalo.....6-ATT	6-8 1/2 x 9	280-900	2836.6	3.60	4	Det...	2	Sep...	Iron	Iron	L...	CI	3.50	.710	Heli...	Idler...	AI	9.00	373.0	2.12x7.69	4
Buffalo.....4-RA	4-5 1/2 x 7	120-1200	759.0	4.20	4	Det...	2	Sep...	Iron	Iron	I...	Si°	2.62	.464	Heli...	Cam	AI	6.62	114.5	1.50x5.44	5
Buffalo.....6-RA	6-5 1/2 x 7	200-1500	1138.5	4.20	4	Det...	2	Sep...	Iron	Iron	I...	Si°	2.62	.464	Heli...	Cam	AI	6.62	114.5	1.50x5.44	5
Buffalo.....8-RA	8-5 1/2 x 7	240-1200	1518.0	4.20	4	Det...	2	Sep...	Iron	Iron	I...	Si°	2.62	.464	Heli...	None	AI	6.62	114.5	1.50x5.44	5
Chris Craft.....B	4-3 1/2 x 4	55-3200	134.0	5.6	4	Det...	4	Int...	Iron	Iron	L...	Si°	1.25	.312	Heli...	None	AI	3.06	20.5	.74x2.81	3
Chris Craft.....A-120	6-5 1/2 x 4	250-2300	824.7	5.6	4	Det...	2	Sep...	Al...	Al...	L...	Si°	2.53	.375	Spur	None	AI	5.87	77.0	1.37x4.25	4
Capital.....LA-12	12-5 1/2 x 7	425-1800	1650.0	5.00	4	Det...	1	Sep...	Al...	Al...	I...	Tun	2.75	.437	Bevel	None	AI	5.25	1.25x4.23	4	
Capital.....T-12	12-5 1/2 x 7.5	575-2000	1947.0	5.30	4	Det...	3	Sep...	Al...	Al...	I...	Si°	2.06	.500	Bevel	None	AI	5.50	1.50x5.25	4	
Chrysler.....Ace C	6-3 1/2 x 4 1/2	73-3200	201.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Ace CR	6-3 1/2 x 4 1/2	60-900	201.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Crown A & C	6-3 1/2 x 4 1/2	93-3200	241.6	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Crown CR	6-3 1/2 x 4 1/2	83-1100	241.6	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Imperial CR	6-3 1/2 x 5	108-3200	309.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Imperial CR	6-3 1/2 x 5	108-1100	309.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Majestic C	6-3 1/2 x 5	152-3200	385.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Chrysler.....Majestic CR	6-3 1/2 x 5	146-1400	385.0	4	Det...	6	Int...	Iron	Iron	Iron	L...	Si°	1.75	.312	Heli...	Idler...	AI	4.75	84.0	1.25x3.47	4
Elco.....F-6	6-4 1/2 x 6	120-1600	638	4.71	4	Det...	2	Sep...	SS	SS	F...	ChN°	2.50	.303	Heli...	None	AS	6.12	77.0	1.37x4.17	4
Elco.....F-42	4-5 1/2 x 6	90-1600	471.0	5.00	4	Det...	2	Sep...	SS	SS	F...	ChN°	2.50	.303	Heli...	None	AS	6.12	77.0	1.37x4.17	4
Elco.....F-62	6-5 1/2 x 6	145-1600	707.0	5.00	4	Det...	2	Sep...	SS	SS	F...	ChN°	2.50	.303	Heli...	None	AS	6.12	77.0	1.37x4.17	4
Erd.....S-4	4-3 1/2 x 5	42.5-2100	179.0	4.75	4	Det...	4	Int...	SS	Al°	L...	Si°	1.75	.320	Spur	None	CI	4.00	34.0	.87x3.19	3
Evansville.....	4-5 1/2 x 6	20-500	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	2.00	.312	Spur	None	CI	5.50	1.12x4.87	3	
Evansville.....	4-5 1/2 x 6	15-500	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.75	.312	Spur	None	CI	5.00	1.00x4.37	3	
Evansville.....Boy Scout	1-3 1/2 x 4	3-500	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....LN-403	4-3 1/2 x 4	20-1800	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....LC-41	4-3 1/2 x 4 1/2	27-1600	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....Rocket	4-2 1/2 x 3 1/2	35-3200	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....LN-43	4-4 1/2 x 5 1/2	40-1000	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....LC-61	6-3 1/2 x 4 1/2	55-2000	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....LNS-43	4-4 1/2 x 5 1/2	60-1400	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....Challenger	6-3 1/2 x 4	60-2500	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....B	6-3 1/2 x 5	70-2200	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Fay & Bowen.....Conqueror	6-4 1/2 x 4 1/2	100-2100	...	...	Int...	1	Sep...	Iron	Iron	Iron	I...	CI	1.25	...	Spur	None	CI	3.87	...	...	3
Hall-Scott.....178	4-4 1/2 x 5 1/2	65-1880	312.0	4.03	4	Det...	4	Sep...	Iron	Iron	I...	Si°	1.94	.312	Chain	None	AI	5.03	56.8	1.25x3.25	6
Hall-Scott.....179	4-4 1/2 x 5 1/2	65-1880	312.0	4.03	4	Det...	4	Sep...	Iron	Iron	I...	Si°	1.94	.312	Chain	None	AI	5.03	56.8	1.25x3.25	6
Hall-Scott.....116, 117	6-5 1/2 x 7	98-2000	468.0	4.74	4	Det...	6	Sep...	Al...	Al...	L...	Si°	1.94	.312	Chain	None	AI	4.92	52.0	1.25x4.44	6
Hall-Scott.....157, 158	6-5 1/2 x 7	191-1800	825.0	4.84	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.51	.312	Chain	None	AI	4.92	78.6	1.25x4.00	5
Hall-Scott.....168, 169	6-5 1/2 x 7	264-2100	998.0	5.07	4	Det...	6	Sep...	Al...	Al...	L...	Si°	2.51	.312	Chain	None	AI	5.31	94.6	1.38x4.41	5
Hall-Scott.....163, 16																					

ENGINES—Continued

CONNECTING RODS			CRANKSHAFT					OILING SYSTEM		WATER CIRCULATION		MISCELLANEOUS							MAKE AND MODEL		
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Ozs.	Material	Offset (Ins.)	Counterbalances Used	Crank Pin		Main Bearings		Pressure to Pump Type	Type	Pump Type	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene	Overall Dimensions (Ins.)					
						Diameter and Length (Ins.)	Number	Front	Rear							Width	Height	Length			
Car...	11.00	66.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	1100	1315	No...	25%	31%	60%	Buda...	LM-468
Car...	11.00	66.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	900	1320	No...	25%	31%	60%	Buda...	LM-525
AST...	13.25	138.6	Car...	None...	No...	3.00x2.25	4	3.00x2.25	3.00x3.69	abede...	Gear...	Pump...	Gear...	1100	1660	No...	25%	35%	70%	Buda...	GM-572
AST...	13.25	138.6	Car...	None...	No...	3.00x2.25	4	3.00x2.25	3.00x3.69	abede...	Gear...	Pump...	Gear...	1100	1675	No...	25%	35%	70%	Buda...	GM-638
Car...	9.50	42.0	Car...	None...	No...	2.12x1.62	5	3.00x1.50	3.00x2.12	abede...	Gear...	Pump...	Gear...	1200	760	No...	23%	27%	51%	Buda...	HM-173-R
Car...	9.50	42.0	Car...	None...	No...	2.12x1.62	5	3.00x1.50	3.00x2.12	abede...	Gear...	Pump...	Gear...	1200	770	No...	23%	27%	51%	Buda...	HM-199-R
Car...	9.50	42.0	Car...	None...	No...	2.12x1.62	5	3.00x1.50	3.00x2.12	abede...	Gear...	Pump...	Gear...	1200	770	No...	23%	27%	51%	Buda...	HM-205-R
Car...	9.50	42.0	Car...	None...	No...	2.12x1.62	5	3.00x1.50	3.00x2.12	abede...	Gear...	Pump...	Gear...	1200	940	No...	22%	28%	59%	Buda...	HM-260-R
Car...	9.50	42.0	Car...	None...	No...	2.12x1.62	5	3.00x1.50	3.00x2.12	abede...	Gear...	Pump...	Gear...	1200	950	No...	22%	28%	59%	Buda...	HM-298-R
Car...	9.50	58.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	1100	1380	No...	24%	29%	65%	Buda...	KM-369-R
Car...	9.50	58.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	1200	1390	No...	24%	29%	65%	Buda...	KM-393-R
Car...	9.50	58.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	1200	1430	No...	24%	29%	65%	Buda...	KM-428-R
Car...	11.00	66.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	1100	1470	No...	25%	31%	68%	Buda...	LM-468-R
Car...	11.00	66.0	Car...	None...	No...	2.37x1.75	7	3.00x1.75	3.00x2.50	abede...	Gear...	Pump...	Gear...	900	1475	No...	25%	31%	68%	Buda...	LM-525-R
AST...	13.25	138.6	Car...	None...	No...	3.00x2.25	4	3.00x2.25	3.00x3.69	abede...	Gear...	Pump...	Gear...	1100	1900	No...	25%	35%	84%	Buda...	GM-638-R
AST...	13.25	138.6	Car...	None...	No...	3.00x2.25	4	3.00x2.25	3.00x3.69	abede...	Gear...	Pump...	Gear...	1100	1870	No...	25%	35%	84%	Buda...	GM-572-R
AST...	10.25	34.0	Car...	None...	No...	1.87x2.17	3	2.25x2.87	2.18x3.00	abef...	Pist...	Opt...	Gear...	850	550	No...	25%	32	51%	Buffalo...	BA
AST...	21.00	352.0	Car...	None...	No...	3.75x4.50	7	4.25x7.00	4.25x7.00	abef...	Gear...	Opt...	Gear...	550	9500	No...	48%	52	160%	Buffalo...	6-ATT
AST...	21.00	352.0	Car...	None...	No...	3.75x4.50	7	4.25x7.00	4.25x7.00	abef...	Gear...	Opt...	Gear...	550	9500	No...	48%	52	160%	Buffalo...	6-ATT
AST...	14.00	136.0	ChrM...	None...	No...	3.00x2.37	5	3.75x4.50	3.75x4.12	abef...	Gear...	Opt...	Gear...	1200	2740	No...	31%	49%	76%	Buffalo...	4-RA
AST...	14.00	136.0	ChrM...	None...	No...	3.00x2.37	5	3.75x4.50	3.75x4.12	abef...	Gear...	Opt...	Gear...	1200	3340	No...	31%	49%	93%	Buffalo...	6-RA
AST...	14.00	136.0	ChrM...	None...	No...	3.00x2.37	9	3.75x4.50	3.75x4.12	abef...	Gear...	Opt...	Gear...	1200	3940	No...	31%	49%	110%	Buffalo...	8-RA
Car...	6.56	20.0	1045	None...	No...	1.74x1.12	3	2.00x1.56	2.00x1.62	abef...	Gear...	Pump...	Gear...	450	No...	No...	23%	41%	63%	Chris Craft...	B
Car...	11.25	85.0	ChN...	None...	Yes...	3.00x2.00	3	3.00x3.25	3.00x3.25	abef...	Gear...	Pump...	Gear...	1640	No...	No...	30	39%	84	Chris Craft...	A-120
AST...	12.00	...	ChN...	None...	No...	2.37x2.50	7	2.62x...	2.62x...	abef...	Gear...	Pump...	Gear...	1950	No...	No...	33%	39%	98%	Capitol...	LA-12
AST...	10.94	...	ChN...	None...	No...	3.00x2.50	7	3.25x...	3.25x...	abef...	Gear...	Pump...	Gear...	1950	No...	No...	33%	39%	98%	Capitol...	T-12
AST...	...	...	...	Yes...	...	...	4	2.25x...	2.25x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Ace CR
AST...	...	...	...	Yes...	...	...	4	2.25x...	2.25x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Ace CR
AST...	...	...	...	Yes...	...	...	4	2.25x...	2.25x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Crown A & C
AST...	...	...	...	Yes...	...	...	4	2.25x...	2.25x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Crown CR
AST...	...	...	...	Yes...	...	...	7	2.62x...	2.62x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Imperial CR
AST...	...	...	...	Yes...	...	...	7	2.62x...	2.62x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Imperial CR
AST...	...	...	...	Yes...	...	...	9	2.75x...	2.75x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Majestic CR
AST...	...	...	...	Yes...	...	...	9	2.75x...	2.75x...	abef...	Gear...	Pump...	Gear...	...	...	...	...	...	...	Chrysler...	Majestic CR
Car...	12.75	132	ChN...	3.00	Yes...	2.37x3.00	4	2.62x3.31	2.62x4.00	abedef...	Gear...	Pump...	Gear...	1000	1750	No...	27	37%	85%	Elco...	F-6
Car...	12.75	132.0	ChN...	3.00	Yes...	2.37x3.00	3	2.62x3.31	2.62x4.00	abedef...	Gear...	Pump...	Gear...	1050	1450	No...	27	37%	70%	Elco...	F-42
Car...	12.75	132.0	ChN...	3.00	Yes...	2.37x3.00	4	2.62x3.31	2.62x4.00	abedef...	Gear...	Pump...	Gear...	1050	1900	No...	27	37%	84	Elco...	F-62
Car...	10.00	48.0	Car...	0.62	No...	2.00x2.00	3	2.00x2.62	2.00x3.62	abef...	Gear...	Pump...	Gear...	1200	360	Yes...	20	26%	52	Erd...	S-4
CS...	10.00	...	Car...	None...	Yes...	1.87x...	5	1.87x4.50	1.87x4.00	abef...	Pump...	Pist...	Pist...	825	No...	No...	16	...	...	Evansville...	
CS...	9.00	...	Car...	None...	Yes...	1.50x...	5	1.87x4.50	1.87x4.00	abef...	Pump...	Pist...	Pist...	575	No...	No...	16	...	...	Evansville...	
...	...	...	Car...	None...	No...	1.25x...	2	1.25x3.00	1.25x3.00	abef...	Pump...	Pist...	Pist...	150	No...	No...	13	18%	15	Evansville...	Boy Scout
...	...	...	...	...	...	...	...	...	...	...	...	...	...	365	No...	No...	...	...	...	Fay & Bowen...	LN-403
...	...	...	...	...	...	...	...	...	...	...	...	...	...	560	No...	No...	...	...	...	Fay & Bowen...	LC-41
...	...	...	...	...	...	...	...	...	...	...	...	...	...	195	No...	No...	...	...	...	Fay & Bowen...	Rocket
...	...	...	...	...	...	...	...	...	...	...	...	...	...	950	No...	No...	...	...	...	Fay & Bowen...	LN-43
...	...	...	...	...	...	...	...	...	...	...	...	...	...	845	No...	No...	...	...	...	Fay & Bowen...	LC-61
...	...	...	...	...	...	...	...	...	...	...	...	...	...	950	No...	No...	...	...	...	Fay & Bowen...	LNS-43
...	...	...	...	...	...	...	...	...	...	...	...	...	...	690	No...	No...	...	...	...	Fay & Bowen...	Challenger
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1075	No...	No...	...	...	...	Fay & Bowen...	B
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1160	No...	No...	...	...	...	Fay & Bowen...	Conqueror
AST...	11.00	103.0	ChN...	None...	No...	2.25x2.00	3	2.75x2.31	2.75x2.31	abef...	Gear...	Pump...	Gear...	1150	1800	Yes...	24%	39%	76%	Hall-Scott...	173
AST...	11.00	103.0	ChN...	None...	No...	2.25x2.00	3	2.75x2.31	2.75x2.31	abef...	Gear...	Pump...	Gear...	1150	1430	Yes...	24%	39%	62%	Hall-Scott...	179
AST...	11.00	104.0	ChN...	None...	No...	2.25x2.00	4	2.75x2.63	2.75x3.63	abef...	Gear...	Pump...	Gear...	900	2050	No...	26%	42	90%	Hall-Scott...	116, 117
AST...	11.00	97.0	ChN...	None...	Yes...	2.38x2.00	7	2.75x2.44	2.75x4.56	abef...	Gear...	Pump...	Gear...	1400	2750	No...	31%	43%	93%	Hall-Scott...	157, 158
AST...	11.00	114.0	ChN...	None...	Yes...	2.50x2.13	7	2.75x1.94	2.75x1.94	abef...	Gear...	Pump...	Gear...	1200	1890	No...	25	39%	74%	Hall-Scott...	168, 169
AST...	11.00	101.0	ChM...	None...	Yes...	2.38x2.00	4	2.75x2.19	2.75x3.19	abef...	Gear...	Pump...	Gear...	1400	No...	No...	29%	42%	90%	Hall-Scott...	163, 164
Car...	11.00	81.0	Car...	None...	No...	2.00x2.25	5	2.00x3.87	2.00x2.62	abef...	Gear...	Pump...	Gear...	1000	858	No...	23%	31%	55%	Kermath...	F
Car...	11.00	80.0	Car...	None...	No...	2.25x2.23	7	2.50x3.91	2.50x2.56	abef...	Gear...	Pump...	Gear...	800	1205	No...	26%	33%	67%	Kermath...	G
Car...	11.00	80.0	Car...	None...	No...	2.25x2.23	7	2.50x3.91	2.50x2.62	abef...	Gear...	Pump...	Gear...	1000	1365	No...	26%	34%	67%	Kermath...	L
Car...	9.50	39.0	Car...	None...	No...	2.12x1.50	7	2.62x2.87	2.62x2.25	abef...	Gear...	Pump...	Gear...	1600	1440	No...	25%	28%	52%	Kermath...	M
Car...	11.00	80.0	Car...	None...	No...	2.25x2.23	7	2.50x3.91	2.50x2.62	abef...	Gear...	Pump...	Gear...								

AMERICAN MARINE

MAKE AND MODEL	Number of Cylinders, Bore and Stroke (Ins.)	Maximum Brake H.P. at Specified R.P.M.	Piston Displacement (Cu. Ins.)	Compression Ratio	Number of Point Suspension	CYLIN- DERS		CRANKCASE		VALVES		FRONT END DRIVE		PISTONS			Number of Rings per Piston					
						Head	No. Cast in One Piece	Upper Half		Material (Lower Half)	Arrangement	Head Material	Clear Diameter (Ins.)	Lift (Ins.)	Type	Non-Metallic Gear Used On?		Material	Length (Ins.)	Weight (with Pins Rings & Bushings) Ozs.	Piston Pin Diameter and Length (Ins.)	
								Integral with Cylinders?	Material													
Lycoming	UAC	4-3 1/2 x 3 3/4	35-2600	118.8	5.02	4	Det...	4	Int.	Iron	Al.	L.	Sil-e.	1.37+	.312	Heli.	None.	AS.	3.50	21.4	.75x2.82	3
Lycoming	UAB	4-3 1/2 x 3 3/4	46-3500	118.8	6.00	4	Det.	4	Int.	Iron	Al.	L.	Sil-e.	1.37+	.312	Heli.	None.	AS.	3.50	21.4	.75x2.82	3
Lycoming	UED	8-3 1/2 x 4 1/4	165-3200	419.60	5.23	4	Det.	8	Int.	Iron	Al.	L.	Sil-e.	1.75+	.343	Heli.	None.	Al.	4.25	32.0	1.00x3.19	4
Lycoming	UCD	8-3 1/2 x 4 1/4	126-3200	322.00	5.50	4	Det.	8	Sep.	Iron	Al.	L.	Sil-e.	1.44+	.343	Heli.	None.	AS.	3.94	27.0	.87x2.90	4
Lycoming	UAD	4-3 1/2 x 3 3/4	40-2800	118.80	5.50	4	Det.	4	Int.	Iron	Al.	L.	Sil-e.	1.37+	.312	Heli.	None.	AS.	3.50	21.4	.75x2.82	3
Midshipman II	L	4-3x3	21-2000	85.0	5.5	4	Det.	2	Sep.	Al.	Al.	T.	ChN	1.19	.312	Spur.	Cam.	Al.	3.75	20.0	.734x2.56	4
Midshipman II	H	4-3x3	33-3000	85.0	5.75	4	Det.	2	Sep.	Al.	Al.	T.	ChN	1.19	.312	Spur.	Cam.	Al.	3.75	20.0	.734x2.56	4
M & T	M-4	4-6 1/2 x 8	90-1000	1062.4	4.21	4	Det.	2	Sep.	Al.	Al.	I.	Sil		.500	Heli.	Al.	Al.			1.25x5.59	4
M & T	M-6	4-6 1/2 x 8	175-1100	1593.6	4.21	4	Det.	2	Sep.	Al.	Al.	I.	Sil		.500	Heli.	Al.	Al.			1.25x5.59	4
M & T	O-C-4	4-6 1/2 x 8	85-1000	1062.4	3.77	4	Det.	2	Sep.	Al.	Al.	I.	Sil		.500	Heli.	Al.	Al.			1.37x4.53	6
M & T	O-C-6	4-6 1/2 x 8	140-1100	1593.6	3.77	4	Det.	2	Sep.	Al.	Al.	I.	Sil		.500	Heli.	Al.	Al.			1.37x4.53	6
M & T	O-C-X-4	4-7 1/2 x 8			4.00	4	Int.	2	Sep.	Al.	Al.	I.	Sil			Heli.	Al.	Al.			1.37x4.53	6
M & T	O-C-X-6	6-7 1/2 x 8	175-900	1980.0	4.00	4	Int.	2	Sep.	Al.	Al.	I.	Sil		.593	Heli.	Al.	Al.			1.37x4.53	6
M & T	K-6	6-6 1/2 x 7 3/4	325-1650	1426.0	5.20	4	Int.	3	Sep.	Al.	Al.	I.	Sil		.375	Heli.	Al.	Al.			1.37x5.87	4
Niagara	Special	4-2 1/2 x 4	95.00				Det.	4	Int.	Iron	Iron	L.	Sil			Heli.	Cam	CI	3.00		.62x2.50	3
Niagara	B-L	8-3 1/2 x 4 1/4	134-3200	371.5	5.52		Det.	8	Int.	Al.	Al.	L.	Sil	1.87	.359	Chain.		Al.	4.00		1.12x3.00	4
Niagara	B-L	8-4 1/2 x 4 1/4	150-3200	452.5	5.40	4	Det.	8	Int.	Al.	Al.	L.	Sil	1.87	.344	Chain.		Al.	4.00		1.12x3.87	4
Regal	Y	1-3 1/2 x 3 1/2	29.0				Int.	1	Sep.	Iron		L.	CI					CI				4
Regal	OA, NB	2-4 1/2 x 4 1/2	8-800	112.0			Int.	1	Sep.	Iron		L.	CI			Spur.		CI				4
Regal	HA	1-4 1/2 x 5 1/2	6-800	97.0			Int.	1	Sep.	Iron	Iron	L.	CI					CI				4
Regal	EA	1-5 1/2 x 6 1/2	7-700	141.0			Int.	1	Sep.	Iron	Iron	L.	CI					CI				4
Regal	GB, GC, GF	6-4 1/2 x 6	75-1000	638.0			Det.	2	Sep.	Iron	Al.	L.	CI			Heli.		CI				4
Regal	KB, KC, KF	6-5 1/2 x 7	110-1100	997.0			Det.	2	Sep.	Iron	Al.	L.	CI					CI				4
Regal	LB, LD, LC	4-6 1/2 x 8	40-400	1026.0			Det.	1	Sep.	Iron	Iron	L.	CI					CI				4
Regal	MTF	6-3 1/2 x 5	35-1000	230.0			Det.	6	Int.	Iron	Al.	L.	CI			Heli.						4
Scraps	41, 43, 51, 53	8-3 1/2 x 3 3/4	85-3800	221.0	6.3	4	Det.	8	Int.	SS	PS.	L.	Sil	1.50		Heli.	Cam	Al			.75x	3
Scraps	45, 47, 55, 57	8-3 1/2 x 3 3/4	85-3800	221.0	6.3	4	Det.	8	Int.	SS	PS.	L.	Sil	1.50		Heli.	Cam	Al			.75x	3
Scraps	F-4	4-3 1/2 x 5	40-1600	220.8	5.00	4	Det.	4	Int.	SS	Al.	L.	Sil-e	1.81	.375	Heli.		Al	4.25		1.12x3.22	4
Scraps	F-6	6-3 1/2 x 5	80-2000	331.2	5.00	8	Det.	6	Int.	SS	Al.	L.	Sil-e	1.81	.375	Heli.		Al	4.25		1.12x3.22	4
Scraps	152, 153	6-4 1/2 x 5 1/2	169-3000	447.0	6.20	4	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.406+	Heli.	None.	Al	5.12	46.0	1.25x3.69	4
Scraps	154, 155	6-4 1/2 x 5 1/2	118-2000	447.0	5.30	4	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.406+	Heli.	None.	Al	5.12	46.0	1.25x3.69	4
Scraps	160, 161, 164, 165	6-4 1/2 x 5 1/2	125-1800		5.50	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.25	.440+	Heli.		Al	5.37	48.0	1.37x4.00	4
Scraps	162, 163	6-4 1/2 x 5 1/2	160-2200	548.4	5.20	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.440+	Heli.		Al	5.37	41.0	1.37x3.75	4
Scraps	170, 171, 174, 175	6-4 1/2 x 5 1/2	140-1800	611.4	4.80	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.440+	Heli.		Al	5.37	44.0	1.37x4.00	4
Scraps	172, 173	6-4 1/2 x 5 1/2	185-2800	611.4	5.20	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.440+	Heli.		Al	5.37	52.0	1.37x4.00	4
Scraps	200, 201, 204, 205	6-5 1/2 x 5 1/2	155-1800	678.0	4.70	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.19+	.440+	Heli.		Al	5.37	52.0	1.37x4.00	4
Scraps	202, 203	6-5 1/2 x 5 1/2	212-2300	678.0	5.50	8	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.19+	.440+	Heli.		Al	5.37	52.0	1.37x4.00	4
Scraps	156, 157	6-4 1/2 x 5 1/2	155-3000	447.0	6.20	4	Det.	2	Sep.	Al.	Al.	L.	Sil-e	2.12	.406	Heli.	None.	Al	5.12	46.0	1.25x3.69	4
Scraps	302, 303	12-4 1/2 x 5 1/2	330-2800	893.0	6.20	4	Det.	2	Sep.	Al.	Al.	L.	Sil	2.12	.406	Heli.	Cam	Al	5.12	46.0	1.25x3.69	4
Scraps	304, 305	12-4 1/2 x 5 1/2	250-2400	893.0	5.30	4	Det.	2	Sep.	Al.	Al.	L.	Sil	2.12	.406	Heli.	Cam	Al	5.12	46.0	1.25x3.69	4
Scraps	306, 307	12-4 1/2 x 5 1/2	300-2800	893.0	6.20	4	Det.	2	Sep.	Al.	Al.	L.	Sil	2.12	.406	Heli.	Cam	Al	5.12	46.0	1.25x3.69	4
Speedway	MC	6-5 1/2 x 7	250-2000	1092.0	5.00		Det.	2	Sep.	Al.	Al.	L.	Spec	2.50	.562	Heli.	None.	Al	6.12		1.37x5.37	6
Speedway	MP	6-5 1/2 x 7	200-1400	1092.0	4.30		Det.	2	Sep.	Al.	Al.	L.	Spec	2.50	.562	Heli.	None.	Al	6.25		1.37x5.37	4
Speedway	P	6-5 1/2 x 7 3/4	120-650	1825.0	3.80		Det.	2	Sep.	CI	CI	L.	Spec	2.62	.468	Heli.	None.	Al	8.25		1.62x6.37	4
Speedway	R	6-7 1/2 x 8	310-1300	1963.0	4.20		Det.	1	Sep.	Al.	Al.	I.	Spec	2.25	.500	Heli.	None.	Al	7.00		1.87x5.50	4
Speedway	S	6-4 1/2 x 6	120-2000	511.0	5.00		Det.	2	Sep.	Al.	Al.	L.	Spec	1.87	.406	Heli.	None.	Al	5.00		1.19x4.00	6
Sterling Neptune	D-2-12	2-5 1/2 x 7	15-500	322.6		4	Int.	2	Sep.	SS	Iron	L.	CI	2.12	.375	Heli.	None.	Al	6.00		1.25x5.12	5
Sterling Chevron 6	F	6-5 1/2 x 6 1/2	150-1500	762.4	3.89	4	Det.	2	Sep.	Iron	Iron	T.	Sil	2.25	.375	Heli.	None.	Al	6.00		1.31x5.12	5
Sterling Dolphin 6	GR-6	6-5 1/2 x 6 1/2	220-1500	1051.6	4.08	4	Det.	2	Sep.	Iron	Iron	I.	Sil*	1.87	.375	Heli.	None.	Al	6.06		1.31x5.12	3
Sterling Petrel	L-6	6-5 1/2 x 6	225-2200	779.3	5.54		Det.	6	Sep.	SS	Al.	L.	Sil*	2.25	.465*	Heli.	None.	Al	5.50		1.44x4.37	4
Sterling Viking II	T-6	8-8x9	425-1200	2714.0	4.18	4	Det.	6	Sep.	Iron	Iron	I.	Sil*	2.59	.556	Heli.	None.	Al	8.25		2.00x7.00	3
Sterling Viking II	T-8	8-8x9	565-1200	3619.0	4.18	4	Det.	6	Sep.	Iron	Iron	I.	Sil*	2.59	.556	Heli.	None.	Al	8.25		2.00x7.00	3
Thorebred	AA	4-3 1/2 x 4 1/2	24-1400	210.0	4.00	4	Det.	2	Sep.	Iron*	Iron*	L.	CI	1.44	.300	Heli.	None.	Al	4.12	64.4	1.44x3.25	3
Thorebred	B	4-4 1/2 x 5	44-1800	318.0	4.00	4	Det.	4	Sep.	Iron*	Iron*	L.	ChN*	1.94	.300	Heli.	None.	Al	4.75	88.7	1.11x3.94	4
Thorebred	BB-4	4-4 1/2 x 6	56-1600	382.0	4.00	4	Det.	4	Sep.	Iron*	Iron*	L.	ChN*	2.12	.300	Heli.	None.	Al	5.25	82.2	1.25x3.87	4
Thorebred	BB-6	4-4 1/2 x 6	80-1725	572.5	4.00	4	Det.	6	Sep.	Iron*	Iron*	L.	ChN*	2.12	.300	Heli.	None.	Al	5.25	82.2	1.25x3.87	4
Thorebred	BBS-6	6-5x8	101-1500	707.0	4.00	4	Det.	6	Sep.	Iron*	Iron*	L.	ChN*	2.12	.300	Heli.	None.	Al	5.25</			

ENGINES—Continued

CONNECTING RODS			CRANKSHAFT				OILING SYSTEM		WATER CIRCULATION		MISCELLANEOUS					MAKE AND MODEL					
Material	Center to Center Length (Ins.)	Weight (with Bushings and Cap) Ozs.	Material	Offset (Ins.)	Counterbalances Used?	Crank Pin		Main Bearings		Pressure to Pump Type	Pump Type	Type	Pump Type	Speed at which Maximum Torque is Developed (R.P.M.)	Weight (without Carburetor or Ignition) Lbs.	Adapted for Use of Kerosene?	Overall Dimensions (Ins.)				
						Diameter and Length (Ins.)	Number	Front	Rear								Width	Height	Length		
Car...	8.00	29.9	Steel	None	No.	1.75x1.50	3	1.87x1.56	1.87x1.81	abce	Gear	Pump	Gear	1500	No.	21%	23 1/2	39	Lycoming	UAC	
Car...	8.00	29.9	Steel	None	No.	1.75x1.50	3	1.87x1.56	1.87x1.81	abce	Gear	Pump	Gear	2000	No.	21%	23 1/2	39	Lycoming	UAB	
Car...	9.00	45.6	Steel	None	No.	2.34x1.69	5	2.62x2.53	2.62x2.75	abce	Gear	Pump	Gear	2000	No.	32%	35 1/2	72 1/2	Lycoming	UED	
Car...	9.00	43.0	Steel	None	No.	2.12x1.50	5	2.37x2.75	2.37x2.80	abce	Gear	Pump	Gear	2000	No.	27%	34 1/2	67 1/2	Lycoming	UCD	
Car...	8.00	29.9	Steel	None	No.	1.75x1.50	3	1.87x1.56	1.87x1.81	abce	Gear	Pump	Gear	2000	No.	21%	23 1/2	39	Lycoming	UAD	
AST...	6.0	20.0	ChN	None	No.	1.25x.812	2	2.00x1.81	2.00x1.81	abce	Gear	Pump	Gear	2000	245	No.	24%	16	26 1/2	Midshipman II	L
AST...	6.0	20.0	ChN	None	No.	1.25x.812	2	2.00x1.81	2.00x1.81	abce	Gear	Pump	Gear	3000	238	No.	24%	17 1/2	26 1/2	Midshipman II	H
AST...	17.31	184.0	ChNM	None	No.	2.56x3.16	5	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	650	2400	No.	35	51 1/2	M & T	M-4	
AST...	17.31	184.0	ChN	None	No.	2.56x3.16	5	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	600	3000	No.	35	51 1/2	M & T	M-6	
AST...	15.50	176.0	ChNM	None	No.	2.56x3.16	7	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	600	2900	Yes	35	54 1/2	M & T	O-C-4	
AST...	15.50	176.0	ChNM	None	No.	2.56x3.16	7	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	600	3725	Yes	35	54 1/2	M & T	O-C-6	
AST...	15.50	176.0	ChNM	None	No.	2.56x3.16	5	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	900	3800	Yes	35	54 1/2	M & T	O-C-X-4	
AST...	15.50	176.0	ChNM	None	No.	2.56x3.16	7	2.56x3.62	2.56x4.25	abede	Gear	Pump	Cent.	1650	2350	No.	29	62 1/2	M & T	O-C-X-6	
AST...	7.50	Car	Car	None	No.	1.44x1.75	2	1.44x2.37	1.44x2.37	a	Pist.	Pump	Gear	321	No.	16%	20	37 1/2	Niagara	Special	
Dur...	9.00	Car	ChN	None	No.	2.25x1.62	5	2.75x2.75	2.75x2.75	abe	Gear	Pump	Gear	865	No.	22%	25 1/2	68 1/2	Niagara	8-L	
	8.00	Car	Car	None	No.	2.25x1.62	5	2.75x2.75	2.75x3.19	abe	Gear	Pump	Gear		No.				Niagara		
Car...		Car	Car	None	Yes						Pist.	Pump	Ping		130	No.			Regal	Y	
Car...		Car	Car	None	Yes						Pump	Ping	Ping		540	No.			Regal	OA, NB	
Car...		Car	Car	None	Yes						Pump	Ping	Ping		400	No.			Regal	HA	
Car...		Car	Car	None	Yes						Pump	Ping	Ping		610	No.			Regal	EA	
Car...		Car	NieS	None	Yes					abde	Gear	Pump	Gear	1700	No.				Regal	GB, GC, GF	
Car...		Car	NieS	None	Yes					abde	Gear	Pump	Gear	2700	No.				Regal	KB, KC, KF	
Car...		Car	Car	None	Yes					abde	Gear	Pump	Ping	2800	No.				Regal	LB, LD, LC	
Car...		Car	Car	None	Yes					ae	Gear	Pump	Gear	800	No.				Regal	MTF	
AST...		Car	NieS	Yes	Yes	2.87x1.75	3			abe	Gear	Pump	Gear	650	No.	23 1/2	31 1/2	42 1/2	Scripps	41, 43, 51, 53	
AST...		Car	NieS	Yes	Yes	2.87x1.75	3			abe	Gear	Pump	Gear	700	No.	23 1/2	31 1/2	42 1/2	Scripps	45, 47, 55, 57	
AST...	10.50	Car	None	No.	No.	2.19x1.87	3	2.25x2.81	2.25x2.81	abe	Gear	Pump	Gear	1200	660	No.	17	20 1/2	Scripps	F-4	
AST...	10.50	Car	None	No.	No.	2.19x1.87	4	2.25x2.81	2.25x2.81	abe	Gear	Pump	Gear	1800	900	No.	15 1/2	20 1/2	Scripps	F-6	
AST...	10.87	70.0	Car	None	Yes	2.75x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	2300	975	No.	28 1/2	32 1/2	Scripps	152, 153	
AST...	10.87	70.0	Car	None	Yes	2.75x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	1200	1050	No.	25 1/2	29 1/2	Scripps	154, 155	
AST...	11.25	NieS	None	Yes	2.87x2.00	4	3.00x3.25	3.00x3.62	abce	Gear	Pump	Gear	1295	No.	23 1/2	27 1/2	66	Scripps	160, 161, 164, 165		
AST...	11.25	80.0	NieS	None	Yes	2.87x2.00	4	3.00x3.25	3.00x3.62	abce	Gear	Pump	Gear	1800	1195	No.	23 1/2	26 1/2	Scripps	162, 163	
AST...	11.25	80.0	NieS	None	Yes	2.87x2.00	4	3.00x3.25	3.00x3.62	abce	Gear	Pump	Gear	1800	1295	No.	23 1/2	27 1/2	Scripps	170, 171, 174, 175	
AST...	11.25	80.0	NieS	None	Yes	2.87x2.00	4	3.00x3.25	3.00x3.62	abce	Gear	Pump	Gear	1800	1195	No.	23 1/2	27 1/2	Scripps	172, 173	
AST...	11.25	80.0	NieS	None	Yes	2.87x2.00	4	3.00x3.25	3.00x3.62	abce	Gear	Pump	Gear	1800	1295	No.	23 1/2	27 1/2	Scripps	200, 201, 204, 205	
AST...	10.87	70.0	Car	None	Yes	2.75x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	1800	975	No.	25 1/2	29 1/2	Scripps	202, 203	
AST...	10.87	141.0	Car	None	Yes	2.75x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	1800	1510	No.	35	33 1/2	Scripps	156, 157	
AST...	10.87	141.0	Car	None	Yes	2.72x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	1200	1710	No.	33 1/2	30 1/2	Scripps	302, 303	
AST...	10.87	141.0	Car	None	Yes	2.72x2.25	4	3.25x2.25	3.25x2.25	abe	Gear	Pump	Gear	1800	1710	No.	33 1/2	30 1/2	Scripps	304, 305	
AST...	15.50	Spec	None	Yes	2.62x3.00	7	2.62x3.00	2.62x3.00	abde	Gear	Pump	Gear	1400	2100	No.				Scripps	306, 307	
AST...	15.50	Spec	None	No.	No.	2.62x3.00	7	2.62x3.00	2.62x3.00	abde	Gear	Pump	Gear	1000	2025	No.				Speedway	MC
NieS...	20.00	Spec	None	No.	No.	2.87x3.62	7	2.87x3.62	2.87x3.62	abde	Gear	Pump	Gear	4800	No.				Speedway	MP	
AST...	19.00	Spec	None	No.	No.	3.50x4.12	7	3.50x4.12	3.50x4.12	abde	Gear	Pump	Gear	800	4000	No.				Speedway	P
AST...	13.50	Spec	None	Yes	2.75x2.12	7	2.75x2.12	2.75x2.12	abde	Gear	Pump	Gear	1300	1300	No.				Speedway	R	
Car...	12.50	Car	None	No.	No.	2.25x2.75	3	2.25x5.00	2.25x5.00	abce	Gear	Pump	Ping	1150	Yes	24	36 1/2	53 1/2	Sterling Neptune	D-2-12	
Car...	14.00	ChN	None	Yes	2.50x3.50	4	2.50x5.22	2.50x5.06	abce	Gear	Pump	Gear	1500	2400	No.	29%	34 1/2	87 1/2	Sterling Chevron 6	F	
Car...	14.00	ChN	None	Yes	2.50x3.50	4	2.50x4.81	2.50x4.81	abce	Gear	Pump	Gear	1500	2300	No.	30%	34 1/2	87 1/2	Sterling Dolphin 6	GR-6	
Car...	12.50	ChN	None	Yes	2.50x2.50	7	3.00x3.00	3.00x3.00	abde	Gear	Pump	Gear	2200	1900	No.	32	34 1/2	71 1/2	Sterling Petrel	L-6	
AST...	18.00	ChN	None	Yes	4.00x3.75	7	4.00x5.50	4.00x3.37	abde	Gear	Pump	Gear	7500	No.	40%	72 1/2	121 1/2	Sterling Viking II	T-6		
AST...	18.00	ChN	None	Yes	4.00x3.87	9	4.00x5.50	4.00x3.37	abde	Gear	Pump	Gear	9000	No.	40%	72 1/2	142 1/2	Sterling Viking II	T-8		
Car...	8.50	43.0	Car	375	No.	1.50x2.12	3	1.50x3.00	1.50x3.00	abe	Vane	Pump	Gear	620	Yes	19%	22 1/2	46 1/2	Therobred	AA	
Car...	10.37	66.0	Car	None	No.	2.00x2.25	3	2.00x4.19	2.00x3.50	abe	Gear	Pump	Gear	830	Yes	20%	26 1/2	54 1/2	Therobred	B	
Car...	11.37	87.0	Car	None	No.	2.56x2.25	5	2.56x4.25	2.56x4.25	abce	Gear	Pump	Gear	1175	Yes	22%	27 1/2	62 1/2	Therobred	BB-4	
Car...	11.37	87.0	Car	None	No.	2.56x2.25	7	2.56x4.25	2.56x4.25	abce	Gear	Pump	Gear	1475	Yes	23%	30%	75 1/2	Therobred	BB-6	
Car...	11.37	87.0	Car	None	No.	2.56x2.25	7	2.56x4.25	2.56x4.25	abce	Gear	Pump	Gear	1565	Yes	24%	30%	75 1/2	Therobred	BBS-6	
Car...	13.25	168.0	Car	None	No.	2.56x3.00	5	2.62x4.50	2.62x4.50	abde	Gear	Pump	Gear	1720	Yes	25%	35 1/2	77	Therobred	BC-4	
Car...	13.25	168.0	Car	None	No.	2.56x3.00	7	2.62x4.50	2.62x4.50	abde	Gear	Pump	Gear	2330	Yes	27%	35 1/2	94 1/2	Therobred	BC-6	
Car...	13.25	168.0	Car	None	No.	2.56x3.00	5	2.62x4.50	2.62x4.50	abde	Gear	Pump	Gear	1730	Yes	25%	35 1/2	77	Therobred	BBS-4	
Car...	13.25	168.0	Car	None	No.	2.56x3.00	7	2.62x4.50	2.62x4.50	abde	Gear	Pump	Gear	2360	Yes	27%	35 1/2	94 1/2	Therobred	BCS-6	
Car...	8.00	27.0	Car	250	No.	1.75x1.50	2	1.75x2.81	1.75x2.87	abe	Vane	Pump	Gear	330	Yes	15%	21 1/2	38 1/2	Therobred	DS	
Car...	1																				

AMERICAN STOCK

MAKE AND MODEL	Designed for	Maximum Load on Spring Pads (Lbs.)	Maximum Drive Shaft Torque (Lb. Ft.)	Type	Final Drive	GEAR MATERIALS (S.A.E. Nos.)				GEAR RATIO					NOMINAL PITCH OF GEARS		FACE OF GEARS		AXLE SHAFT		RANGE OF SPRING CENTERS		Propulsion Taken by	Torque Taken by	Provision for Radius Rods	
						First Reduction		Final Reduction		First Reduction			Final Reduction		First Reduction	Final Reduction	First Reduction	Final Reduction	Diameter at Differential End (Inch.)	Diameter at Wheel End (Inch.)	Material S.A.E. No.	Maximum				Minimum
						Pinion	Gear	Pinion	Gear	Standard	Optional	Optional	Standard	Optional												
Clark B364	Trucks	++	++	1/2F	SB	2315	2315			5.66	5.10	6.37			4.25		1.25		1.63	1.97	3140	40	38 1/2	Sp...	Sp...	No...
Clark B373	Trucks	++	++	FF	SB	2315	4620			5.66	6.37	5.10			4.25		1.44		1.62	1.56	3140	43 3/4	38	Sp...	Sp...	No...
Clark B374	Trucks	++	++	FF	SB	2315	4620			5.66	6.37	5.10			4.25		1.44		1.62	1.56	3140	41	38	Sp...	Sp...	No...
Clark B611	Trucks	++	++	FF	SB	2512	4620			5.66	6.37	6.87			3.80		1.69		1.75	1.69	3140	41	37 1/2	Sp...	Sp...	No...
Clark B805	Trucks	++	++	FF	SB	2512	2315			5.75	6.43	7.17			2.80		2.12		2.06	1.94	3140	41	37 1/2	Sp...	Sp...	No...
Clark B613	Trucks	++	++	FF	SB	2512	4620			5.66	6.37	6.87			3.80		1.69		1.75	1.69	3140	41	37 1/2	Sp...	Sp...	No...
Clark B642	Trucks	++	++	FF	SB	2512	2315			6.43	7.17				2.82		2.12		1.95	1.75	3140	41	37 1/2	Sp...	Sp...	No...
Clark B806	Trucks	++	++	FF	SB	2512	2315			5.60	6.37	7.12			3.34		1.75		2.06	1.94	3140	41	37 1/2	Sp...	Sp...	No...
Clark B8000	Trucks	++	++	FF	SB	2315	4620			5.62	6.28				4.08		1.69		1.62	1.50	3140	43	39	Sp...	Sp...	No...
Clark B473	Trucks	++	++	FF	SB	2315	4620			5.66	6.37	6.87			3.80		1.69		1.75	1.56	3140	43 3/4	39 1/2	Sp...	Sp...	No...
Columbia 10000A	Cars			1/2F	SB	2320	2320			4.70	4.40				4.70		1.12		1.19	1.37	4140	Var.	Var.	Sp...	Sp...	No...
Columbia 17000A	Cars			1/2F	SB	2320	2320			4.50	4.70				4.70		1.25		1.31	1.50	4140	Var.	Var.	Sp...	Sp...	No...
Columbia 38000A	Cars			1/2F	Hyp	2320	2320								5.00		1.50		1.43	1.50	4140	Var.	Var.	Sp...	Sp...	No...
**Columbia 800A	Cars			1/2F	SB	4615	4615			4.30	3.23	4.70	3.53		4.20		1.38		1.31	1.50	4145	Var.	Var.	Sp...	Sp...	No...
Eaton 966	Trucks			FF	SB	2512	2315			6.16	5.28				3.25		1.50		1.62	1.50	4145	38	Var.	Sp...	Sp...	No...
Eaton 972	Trucks			FF	SB	2512	2315			6.16	5.28	6.60			3.18		1.62		1.62	1.50	4145	38	Var.	Sp...	Sp...	No...
Eaton 1640	Trucks			FF	SB	2512	2315			5.62	6.50	7.40			3.40		1.75		1.81	1.62	4145	40	Var.	Sp...	Sp...	No...
Eaton 1620	Trucks			FF	SB	2512	2315			5.62	6.50	7.40			3.39		1.75		1.81	1.62	4145	40	Var.	Sp...	Sp...	No...
Eaton 1718	Trucks			FF	SB	2512	2315			6.57	7.14				3.29		1.75		1.97	1.75	4145	40	Var.	Sp...	Sp...	No...
Eaton 1722	Trucks			FF	SB	2512	2315			6.50	6.14	7.20			2.79		1.75		1.97	1.75	4145	40	Var.	Sp...	Sp...	No...
Eaton 1745	Trucks			FF	DR	2512	2315	2512	2315	2.18	2.56	1.92	8.05	9.43	3.00	4.00	1.62	3.31	1.97	1.75	4145	40	Var.	Sp...	Sp...	No...
Eaton 2522	Trucks			FF	SB	2512	2315			6.43	7.16	5.62			3.00		1.87		1.97	1.75	4145	40	Var.	Sp...	Sp...	No...
Eaton 2622	Trucks			FF	DR	2512	2315	2512	2315	2.30			8.50	9.43	2.76	4.00	1.75	3.31	2.12	1.84		40	Var.	Sp...	Sp...	No...
Eaton 58	Trucks			FF	DR	2512	2512	2512	2315	2.23	2.64		8.40	9.94	3.13	4-5	1.75	3.25	2.12	1.84		41 1/2	Var.	Sp...	Sp...	No...
Eaton 80	Trucks			FF	DR	2512	2512	2512	2315	2.08			7.98	6.37	2.40	3.50	2.00	4.00	2.62	2.29		40	Var.	Sp...	Sp...	No...
Eaton 1167	Trucks			FF	FF	2512	2512	2512	2315	6.16			12.13		6.00	3.25		1.50	1.62	1.50	4145	38	Var.	Sp...	Sp...	No...
Eaton 1206	Trucks			FF	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50	1.75	1.50	4145	39 1/2	Sp...	Sp...	No...	
Eaton 1250	Trucks			FF	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50	1.75	1.50	4145	43 1/2	TT	TT	Yes	
Eaton 1275	Trucks			FF	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50	1.75	1.50	4145	38 1/2	Sp...	Sp...	No...	
Eaton 1280	Trucks			FF	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50	1.75	1.50	4145	42	Sp...	Sp...	No...	
Eaton C70	Trucks			FF	DR	2512	2512	2512	2315	2.33	2.08		2.73	3.84	1.86	3.11	2.00	4.00	2.50	2.18		41	Sp...	Sp...	No...	
Eaton 1205	Trucks			1/2F	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50			4145	42	TT	TT	Yes	
Eaton C15	Trucks			FF	SB	2512	2315			5.28	4.87				3.61		1.25		1.37	1.12	4145	41 1/2	Sp...	Sp...	No...	
Eaton 1204	Trucks			FF	Int.	2512	2320	2350	2320	5.14			1.39		2.93	1.29	1.56	1.50	1.75	1.37		38 1/2	Sp...	Sp...	No...	
Salisbury S	Cars	+1000	\$ 425	1/2F	SB	2315	2315			5.25	Var.	Var.			Var.		1.06		.979	1.00	4140	Var.	Var.	TT	TT	Yes
Salisbury 20	Cars	+1800	\$ 750	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.25		1.13	1.31	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 30	Cars	+1800	\$ 825	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.25		1.18	1.31	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 30-1	Cars	+2000	\$ 875	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.25		1.22	1.50	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 40	Cars	+2200	\$ 950	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.28		1.22	1.50	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 40-1	Cars	+2000	\$ 950	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.28		1.22	1.38	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 51	Cars	+2400	\$1050	1/2F	SB	4620	4620			Var	Var.	Var.			Var.		1.41		1.31	1.56	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 50	Cars	+2400	\$1050	1/2F	Hyp	4620	4620			Var	Var.	Var.			Var.		1.44		1.31	1.56	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 50-1	Cars	+2200	\$ 950	1/2F	Hyp	4620	4620			Var	Var.	Var.			Var.		1.44		1.22	1.50	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 51-1	Trucks	+3500	\$1200	FF	SB	4620	4620			Var	Var.	Var.			Var.		1.41		1.31		4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 52	Cars	+2500	\$1200	1/2F	Hyp	4620	4620			Var	Var.	Var.			Var.		1.44		1.31	1.56	4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 90	Trucks	+6000	\$2100	FF	SB	4620	4620			Var	Var.	Var.			Var.		1.63		1.63		4140	Var.	Var.	Sp...	Sp...	No...
Salisbury 100	Trucks	+2500	\$2500	FF	SB	4620	4620			Var	Var.	Var.			Var.		1.87		1.69		4140	Var.	Var.	Sp...	Sp...	No...
Timken 53300	Trucks	++	++	FF	SB	4615	4615						6.60	5.66	12.62		1.69		1.75	1.50		39	Sp...	Sp...	No...	
Timken 54200	Trucks	++	++	FF	SB	4615	4615			5.83	4.86	6.80			12.62		1.69		1.75	1.62	3240	41	39	Sp...	Sp...	Yes
Timken 56200	Trucks	++	++	FF	SB	4615	4615			6.17	5.29	5.71			14		2.13		1.87	1.75	3240	41	39	Sp...	Sp...	Yes
Timken 58205	Trucks	++	++	FF	SB	4615	4615			6.83	5.57	6.14			16		2.60		2.00	1.81	4324	41	39	Sp...	Sp...	Yes
Timken 64800	Trucks	++	++	FF	Wo	4615				6.00	6.40	7.40						1.87	1.75	3240	41	39	Sp...	Sp...	Yes	
Timken 65205	Trucks	++	++	FF	Wo	4615				7.50	6.75	8.75						2.00	1.81	4324	41	39	Sp...	Sp...	Yes	
Timken 65725	Trucks	++	++	FF	Wo	4615				8.50	6.80	7.75						2.25	2.00	4324	41	39	Sp...	Sp...	Yes	
Timken 66725	Trucks	++	++	FF	Wo	4615				8.20	6.80	10.25						2.37	2.12	4324	41	39 1/2	Sp...	Sp...	Yes	
Timken 68720																										

REAR AXLES

Designed for Hitchhike Drive	Location of Spring Pads	DIFFERENTIAL			SERVICE BRAKE			EMERGENCY BRAKE			BEARINGS					Axle Housing Material (S.A.E. No.)	Minimum Road Clearance With Regular Tire Size (Ins.)	Tread (Ins.)	Weight (Lbs.)	Recommended Lubricant	MAKE AND MODEL						
		Make	Type	Number of Pinions	Make and Type	Diameter of Drum (Ins.)	Lining		Type and Location	Diameter of Drum (Ins.)	Lining		Location of Brake Shaft Arms	First Reduction Pinion	Final Reduction Pinion							At Differential	At Wheels	On Pinion Shaft			
							Width (Ins.)	Thickness (Ins.)			Width (Ins.)	Thickness (Ins.)													Width (Ins.)	Thickness (Ins.)	
Yes	Opt.	Frost	B.	4	Own-IH.	15	2 1/4	3/8						Ball.		Roller.	Roller.	Roller.	Ball.	Steel.	8 1/2-30	57	250	Oil.	Clark	B364	
Yes	Opt.	Frost.	B.	2		15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	9 1/2-32	63 1/2	300	Oil.	Clark	B373	
Yes	Opt.	Frost.	B.	2		15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	9 1/2-32	56 1/2	292	Oil.	Clark	B374	
Yes	Opt.	Frost.	B.	4		16	3	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	8 1/2-32	63 1/2	412	Oil.	Clark	B611	
Yes	Opt.	Fair.	B.	4	Own-IH.	17 1/4	4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	7 1/2-32	69 1/2	627	Oil.	Clark	B805	
Yes	Opt.	Frost.	B.	4		16	3 3/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	8 1/2-32	63 1/2	420	Oil.	Clark	B613	
Yes	Opt.	Fair.	B.	4		17 1/4	4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	7 1/2-32	66 1/2	530	Oil.	Clark	B642	
Yes	Opt.	Fair.	B.	4	Own-IH.	17 1/4	4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	7 1/2-32	66 1/2	588	Oil.	Clark	B806	
Yes	Opt.	Frost.	B.	2	-IH.	15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	9-32	65	300	Oil.	Clark	B8000	
Yes	Opt.	Frost.	B.	2	-IH.	15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Steel.	8 1/2-32	64	350	Oil.	Clark	B473	
Yes	B.A.	Own.	B.	2												Roller.	Roller.	Roller.	Roller.	1010		61 1/2		LB	Columbia	10000A	
Yes	B.A.	Own.	B.	2												Roller.	Roller.	Roller.	Roller.	1010		61 1/2		LB	Columbia	17000A	
Yes	B.A.	Own.	B.	2	Wag-H.	15 1/4	2 1/4	3/8	None	No.	No.	No.				Roller.	Roller.	Roller.	Roller.	1010		60		LB	Columbia	38000A	
Yes	B.A.	Own.	B.	2	Ben-H.	12	2	3/8								Roller.	Roller.	Roller.	Roller.	1010				Oil.	Columbia	800A	
Yes	AA.	Own.	B.	2	Ben-2 Shoe	14	2	3/8	None				OF	Roller.	None.	Roller.	Roller.	Roller.	Roller.	Mal.		60 1/4	357	Oil.	Eaton	966	
Yes	AA.	Own.	B.	2	Ben-2 Shoe	15	2 1/4	3/8					OF	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		60 1/4	401	Oil.	Eaton	972	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17 1/4	3	3/8	None				IF	Ball.		Roller.	Roller.	Roller.	Ball.	Mal.		66	380	Oil.	Eaton	1640	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	16	2 3/4	3/8					OF	Ball.		Roller.	Roller.	Roller.	Ball.	Mal.		65	493	Oil.	Eaton	1620	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17 1/4	3	3/8	None				OF	Ball.		Roller.	Roller.	Roller.	Ball.	Mal.		69	1464	Oil.	Eaton	1718	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17	3	3/8					IF	Ball.		Roller.	Roller.	Roller.	Ball.	Mal.		66 1/2	628	Oil.	Eaton	1722	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17 1/4	3	3/8	None				IF	Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.		69	1557	Oil.	Eaton	1745	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17	4	3/4	None				IF	Ball.		Roller.	Roller.	Roller.	Ball.	Mal.		68 1/2	769	Oil.	Eaton	2522	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	17	4	3/4	None				IF	Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.		71 1/4	850	Oil.	Eaton	2622	
Yes	Opt.	Own.	B.	4	Own-Int.	17	5	3/8	None				IF	Ball.	Ball.	Ball.	Roller.	Roller.	Roller.	CS.		73 1/4	956	Oil.	Eaton	58	
Yes	AA.	Own.	B.	4	Own-Int.	17	6	3/8	None				IF	Ball.	Ball.	Ball.	Roller.	Roller.	Roller.	CS.		71 1/4	1376	Oil.	Eaton	80	
Yes	AA.	Own.	B.	2	Ben-2 Shoe	14	2	3/8					OF	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		60 1/4	376	Oil.	Eaton	1167	
Yes	AA.	Own.	B.	4	Clark-Hyd.	15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	CS.		65		Oil.	Eaton	1206	
No	AA.	Own.	B.	4										Roller.		Roller.	Roller.	Roller.	Roller.	CS.		65		Oil.	Eaton	1250	
Yes	AA.	Own.	B.	4	Ben-2 Shoe	15	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		62 1/2		Oil.	Eaton	1275	
Yes	AA.	Own.	B.	4	Wag-Hyd.	16	2 1/4	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		65 1/2		Oil.	Eaton	1280	
Yes	Opt.	Own.	B.	4	Ben-2 Shoe	17	5	3/8						IF	Ball.	Ball.	Ball.	Roller.	Roller.	Steel.		72		Oil.	Eaton	C70	
No	AA.	Own.	B.	4										Ball.		Roller.	Roller.	Roller.	Roller.	Ball.				Oil.	Eaton	1205	
Yes	BA.	Own.	B.	2	Ben-Hyd.	14	2	3/8						Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		59 1/4		Oil.	Eaton	C15	
Yes	AA.	Own.	B.	4										Roller.		Roller.	Roller.	Roller.	Roller.	Steel.		61 1/4		Oil.	Eaton	1204	
No	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Ball.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	60	Oil.	Salisbury	S	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.		Oil.	Salisbury	20	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.					None	Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1100	Oil.	Salisbury	30	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1108	Oil.	Salisbury	30-1	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.					None	Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1115	Oil.	Salisbury	40	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.		Oil.	Salisbury	40-1	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1145	Oil.	Salisbury	51	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.					None	Roller.	Roller.	Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1145	Oil.	Salisbury	50	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.	1140	Oil.	Salisbury	50-1	
Yes	AA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1040	Var.	Var.		Oil.	Salisbury	51-1	
Yes	BA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Roller.		Roller.	Roller.	Roller.	Roller.	1020	Var.	Var.		Oil.	Salisbury	52	
Yes	AA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Ball.		Roller.	Roller.	Roller.	Roller.	1040	Var.	Var.	62	Oil.	Salisbury	90	
Yes	AA.	Spicer	B.	2	Var-Var.	Var.	Var.	Var.						Ball.		Roller.	Roller.	Roller.	Roller.	1040	Var.	Var.	63	Oil.	Salisbury	100	
Yes	AA.	Timken	B.	4	Int-Rw.	Opt.	Opt.	Opt.	None	No.	No.	No.	Opt.			Roller.	Roller.	Roller.	Roller.	Mal.		65			Timken	53300	
Yes	AA.	Timken	B.	4	Int-Rw.	16	Opt.	Opt.	None	No.	No.	No.	Opt.	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		64 1/2			Timken	54200	
Yes	AA.	Timken	B.	4	Int-Rw.	Opt.	Opt.	Opt.	None	No.	No.	No.	Opt.	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		67 1/2			Timken	56200	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	4	Opt.	None	No.	No.	No.	Opt.	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		69 1/2			Timken	58205	
Yes	AA.	Timken	B.	4	Int-Rw.	Opt.	Opt.	Opt.	None	No.	No.	No.	IF	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		67 1/2			Timken	64900	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	4	Opt.	Int-Ds				IF	Roller.		Roller.	Roller.	Roller.	Roller.	Mal.		69 1/2			Timken	65205	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	4	Opt.	Int-Ds				IF	Roller.		Roller.	Roller.	Roller.	Roller.	1010		70			Timken	65725	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	4	Opt.	Int-Ds				IF	Roller.		Roller.	Roller.	Roller.	Roller.	1010		72 1/2			Timken	66725	
Yes	AA.	Timken	B.	4	Int-Rw.	21	Opt.	Opt.	Int-Ds				IF	Roller.		Roller.	Roller.	Roller.	Roller.	1010		72 1/2			Timken	68720	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	4	Opt.	Int-Ds				Opt.	Roller.	Roller.	Roller.	Roller.	Roller.	Roller.	Mal.		69 1/2			Timken	75200	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	5	Opt.	Int-Ds				IF	Roller.	Roller.	Roller.	Roller.	Roller.	Roller.	1010		70			Timken	75733	
Yes	AA.	Timken	B.	4	Int-Rw.	17 1/4	5 1/2	Opt.	Int-Ds				IF	Roller.	Roller.	Roller.	Roller.	Roller.	Roller.	1010		72 1/2			Timken	76733	
Yes	AA.	Timken	B.	4	Int-Rw.	21	5 1/2	Opt.	Int-Ds				IF	Roller.	Roller.	Roller.	Roller.	Roller.	Roller.	1010		72 1/2			Timken	79730	
Yes	Opt.	Own.	B.	4	Lock-H.	16	3 1/4	1/2	None	No.	No.	No.		Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.		11-36	66	780	Oil.	Wisconsin	5000L
Yes	Opt.	Own.	B.	4	Lock-H.	17 1/4	4	3/8	None	No.	No.	No.		Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.		12-38	69 1/2	960	Oil.	Wisconsin	72000L
Yes	Opt.	Own.	B.	4	Lock-H.	17 1/4	5	3/8	None	No.	No.	No.		Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.		11-38	69 1/2	1275	Oil.	Wisconsin	1337BH
Yes	Opt.	Own.	B.	4	Wes-Air.	17 1/4	5	3/8	None	No.	No.	No.		Roller.	Roller.	Ball.	Roller.	Roller.	Roller.	Mal.</							

IG—Internal Gear
IH—Internal Hydraulic
Int—Internal
Int Ds—Internal Driveshaft

Int Rw—Internal Rear Wheels
LB—Lead Base
Lock-H—Lockheed Hydraulic
Mal—Malleable Iron

NiA—Nickel Alloy
NewP—New Process
No. F—Non-Fluid
OF—Outside of Frame

Opt—Optional
PS—Pressed Steel
RR—Radius Rods
S—Spur

S-A—Springs and Torque Arm
SB—Spiral Bevel
Sp—Springs
Spec—Special

T—Trucks
TA—Torque Arm
TT—Torque Tube
Var—Variable

Wag—Wagner Electric
War—Warner
Wes-Air—Westinghouse Air
We—Worm Brakes

AMERICAN STOCK CLUTCHES

MAKE AND MODEL	Designed for	Rated Torque Capacity (Lbs. ft.)	Type	Facing Material	DIAMETER OF FACING		Drive Members	Driven Members	Disk or Plate Material	No. of Springs	PRESSURES (Lbs.)				Overall Outside Diam- eter of Clutch (In.)	Type of Throat Bearing	DRIVE TAKEN BY		Means of Adjustment	Is Clutch Brake Provided	Ball Housing (S.A.E.) (Nos.)	Weight (Lbs.)	
					Outside (In.)	Inside (In.)					Total Spring Pressure	Total Pressure on Friction Face	Pressure per Sq. In. of Friction Surface	Pressure Required at Throat Bearing to Disengage			From Flywheel to Driving Members of Clutch	From Driving Members of Clutch to Driving Shaft of Clutch					
Borg & Beck	9A-6 Cars	150	SP	Mo.	9.25	5.62	2	1	Steel	9	1215	1215	28.7	275	11 1/2	Opt.	L.O.P.	Spines	None	No.	1,2,3,4,5	16.5	
Borg & Beck	10A-4, 10A-6 Cars, T	185-150	SP	Mo.	9.87	6.12	2	1	Steel	9	1470	1470	31.2	300	12 1/2	Opt.	L.O.P.	Spines	None	No.	1,2,3,4,5	21.1	
Borg & Beck	11A-6 Cars, T	250-180	SP	Mo.	11.00	6.12	2	1	Steel	12	1770	1770	27.0	365	13 1/2	Opt.	L.O.P.	Spines	None	No.	1,2,3,4,5	28.5	
Borg & Beck	12Q, 12Q1 T, Bus.	200	SP	Wo.	11.87	7.25	2	1	Steel	1	300	1590	23.0	350	12 1/2	Opt.	Pins	Spines	SCP	No.	1,2,3	36 1/2	
Borg & Beck	13Q T, Bus.	260	SP	Wo.	12.87	7.25	2	1	Steel	1	300	1590	17.8	350	13 1/2	Opt.	Pins	Spines	SCP	No.	1,2,3	41 1/2	
Borg & Beck	14Q T, Bus.	375	SP	Wo.	13.87	7.25	2	1	Steel	1	350	2117	19.3	375	14 1/2	Opt.	Pins	Spines	SCP	No.	1,2	57	
Brown-Lipe	70 T & B, Tr.	Var.	MD	Var.	9.45	6.45	14	14	Steel	2	Var.	Var.	Var.	Var.	11 1/2	Ball.	Gear T.	Keys	Sp B.	Yes	1,2,3	Var.	
Brown-Lipe	35 T, B, Tr.	Var.	MD	Var.	8.43	6.25	5	5	Steel	2	Var.	Var.	Var.	Var.	11 1/2	Ball.	Gear T.	Keys	Sp B.	Yes	2.4	Var.	
Brown-Lipe	51 T, B, Tr.	Var.	MD	Var.	8.43	6.25	6	6	Steel	2	Var.	Var.	Var.	Var.	11 1/2	Ball.	Gear T.	Keys	Sp B.	Yes	2.3	Var.	
Brown-Lipe	55 T, B, Tr.	Var.	MD	Var.	8.43	6.25	7	7	Steel	2	Var.	Var.	Var.	Var.	11 1/2	Ball.	Gear T.	Keys	Sp B.	Yes	1.2,3	Var.	
Brown-Lipe	60 T, B, Tr.	Var.	MD	Wo.	8.43	6.25	8	8	Steel	2	Var.	Var.	Var.	Var.	11 1/2	Ball.	Gear T.	Keys	Sp B.	Yes	1.2,3	Var.	
Brown-Lipe	12 C, T & B.	Var.	SP	Var.	11.87	7.25	1	1	Cast I.	1	Var.	Var.	Var.	Var.	13 1/2	Ball.	Lugs	Spines	ThR.	Yes	1.2,3	41	
Brown-Lipe	14 T, B, Tr.	Var.	SP	Var.	13.75	7.37	1	1	Cast I.	2	Var.	Var.	Var.	Var.	15 1/2	Ball.	Lugs	Spines	ThR.	Yes	1.2	64	
Brown-Lipe	13-2 T, B, Tr.	Var.	DP	Var.	13.00	7.37	2	2	Cast I.	1	Var.	Var.	Var.	Var.	15 1/2	Ball.	L&P	Spines	ThR.	Yes	1.2	79 1/2	
Brown-Lipe	13 S.P. T, Bus.	Var.	SP-D	Wo.	12.87	7.25	1	1	Nic I.	1	Var.	Var.	Var.	Var.	14 1/2	Ball.	Lugs	Spines	Shims	Yes	1.2,3	Var.	
Detlaff	JA Cars	110	MD	Wo.	7.87	5.43	3	2	Steel	3	300	300	1.9	300	10	Ball.	Pins	Pins	Sp B.	Yes	3,4,5	15	
Detlaff	M Cars	200	MD	Wo.	8.37	6.50	4	4	Steel	4	360	360	2.05	360	11 1/2	Ball.	Gear T.	Gear T.	None	No.	1,2,3,4,5	30	
Detlaff	D & H C, T, B & Tr.	500	MD	Wo.	8.37	6.50	9*	9*	Steel	3	500	500	Var.	500	11 1/2	Ball.	Gear T.	Gear T.	Sp B.	Yes	1.2,3	55	
Fuller	1-SC-10 T, B & Tr.	Bar.	MD	Wo.	8.16	5.87	5	4	Steel	1	550	550	Var.	550	.....	Ball.	Gear T.	Pins	None	No.	1,2,3,4,5	83
Fuller	1-SC-12 T, B & Tr.	Var.	MD	Wo.	8.16	5.87	6	5	Steel	1	550	550	Var.	550	.....	Ball.	Gear T.	Pins	None	No.	1,2,3,4,5	87
Fuller	1-SC-14 T, B & Tr.	Var.	MD	Wo.	8.16	5.87	7	6	Steel	1	550	550	Var.	550	.....	Ball.	Gear T.	Pins	None	No.	1,2,3,4,5	89
Fuller	1-SC-16 T, B & Tr.	Var.	MD	Wo.	8.16	5.87	8	7	Steel	1	550	550	Var.	550	.....	Ball.	Gear T.	Pins	None	No.	1,2,3,4,5	93
Fuller	1-SC-10-10 T, Bus.	MD	MD	Wo.	9.87	6.75	5	4	Cast I.	1	700	700	1.71	700	.....	Ball.	Gear T.	Pins	None	No.	1.2,3	.....
Fuller	1-SC-12-10 T, B & Tr.	MD	MD	Wo.	9.87	6.75	6	5	Cast I.	1	725	725	1.48	725	.....	Ball.	Gear T.	Pins	None	No.	1.2,3	90
Hele-Shaw	5 T, B & Tr.	200	Mo.	None	None	None	15	14	Br & St	1	250	250	.....	250	10 1/2	Ball.	Spines	Spines	ThR.	Yes	.....	58
Hele-Shaw	6, 7 T, B & Tr.	300*	Mo.	None	None	None	12*	11*	Br & St	1	400	400	.....	400	12 1/2	Ball.	Spines	Spines	ThR.	Yes	.....	82*
Hele-Shaw	8, 10 T, B & Tr.	580*	Mo.	None	None	None	16*	15*	Br & St	1	450	450	.....	450	15 1/2	Ball.	Spines	Spines	ThR.	Yes	.....	150*
Hele-Shaw	150HP T, B & Tr.	1000	Mo.	None	None	None	14	14	Br & St	1	600	600	.....	600	21 1/2	Ball.	Spines	Spines	None	No.	.....	500
Illinois	Z-8 C, T, B, Tr	120	SP	W-M	7.87	5.12	2	1	Steel	1	Var.	Var.	Var.	Var.	120	Ball.	Bracket	Spines	Shims	No.	1,2,3,4,5	8
Illinois	Z-9 C, T, B, Tr	150	SP	W-M	8.87	6.12	2	1	Steel	1	Var.	Var.	Var.	Var.	190	Ball.	Bracket	Spines	Shims	No.	1,2,3,4,5	9 1/2
Illinois	Z-10 C, T, B, Tr	200	SP	W-M	9.87	6.12	2	1	Steel	1	Var.	Var.	Var.	Var.	230	Ball.	Bracket	Spines	Shims	No.	1,2,3,4,5	13
Illinois	Z-11 C, T, B, Tr	250	SP	W-M	10.87	6.12	2	1	Steel	2	Var.	Var.	Var.	Var.	250	Ball.	Bracket	Spines	Shims	No.	1.2,3,4
Illinois	Z-12 C, T, B, Tr	350	SP	W-M	11.87	6.12	2	1	Steel	2	Var.	Var.	Var.	Var.	300	Ball.	Bracket	Spines	Shims	No.	1.2,3
Illinois	Z-14 C, T, B, Tr	5.75	SP	W-M	13.87	6.12	2	1	Steel	2	Var.	Var.	Var.	Var.	375	Ball.	Bracket	Spines	Shims	No.	1.2
Illinois	Z-16 T, B, Tr.	725	SP	W-M	15.87	7.00	2	1	Steel	3	Var.	Var.	Var.	Var.	375	Ball.	Bracket	Spines	Shims	No.	Special
Illinois	Z-18 T, B, Tr.	1250	SP	W-M	17.75	7.00	2	1	Steel	3	Var.	Var.	Var.	Var.	400	Ball.	Bracket	Spines	Shims	No.	Special
Jones	29 C, T, B	530	MD	W-M	8.87	5.25	2	2	Steel	12	1500	1500	.....	500	11 1/2	Ball.	Gear T.	Spines	Sp B.	No.	.....	19
Jones	31 C, T	230	SP	W-M	9.87	5.00	1	1	Steel	12	Var.	Var.	.....	250	11 1/2	Ball.	R.C.S.	Spines	Sp B.	No.	.....	17
Jones	35 C, T	200	SP	W-M	8.87	6.37	1	1	Steel	12	Var.	Var.	.....	250	11 1/2	Ball.	R.C.S.	Spines	Sp B.	No.	.....	19
Jones	Recess Flywheel 37 C, T, B	360	SP	W-M	10.87	6.37	1	1	Steel	12	Var.	Var.	.....	250	12 1/2	Ball.	R.C.S.	Spines	Sp B.	No.	.....	24
Jones	30 C, T	203	SP	Mo.	9.87	6.37	1	1	Steel	12	1500	1500	34	333	12	Ball.	Cov. B.	Spines	Sp B.	No.	3,4,5	24	
Jones	33A C, T	438	DP	Mo.	9.87	6.37	2	2	Steel	12	1620	1620	37	386	11 1/2	Ball.	Gear T.	Spines	Sp B.	No.	3,4,5	33	
Jones	Flat Flywheel 36 C, T	228	SP	Mo.	10.87	7.37	1	1	Steel	12	1500	1500	30	333	12 1/2	Ball.	Cov. B.	Spines	Sp B.	No.	3,4,5	27	
Jones	45 C, T	271	SP	Mo.	11.87	9.37	1	1	Steel	12	1500	1500	44	333	13 1/2	Ball.	Cov. B.	Spines	Sp B.	No.	3,4,5	28	
Jones	Recess Flywh. 31A & C, T	.....	SP	Mo.	10.00	6.37	1	1	Steel	24	Var.	Var.	.....	250	.....	Ball.	Cov. B.	Spines	Sp B.	No.	.....	.....
Jones	Recess Flywheel 55 C, T	.....	SP	Mo.	9.25	5.25	1	1	Steel	24	Var.	Var.	.....	200	.....	Ball.	Cov. B.	Spines	Sp B.	No.	.....	.....
Jones	Recess Flywheel 52 C, T, B	260	SP	W-M	11.00	6.50	1	1	Steel	24	Var.	Var.	.....	33	12.6	Ball.	Cov. B.	Spines	Sp B.	No.	.....	27
Jones	Flat Flywheel 54 C, T	175	SP	Mo.	9.87	5.87	1	1	Steel	24	Var.	Var.	35	250	11.2	Ball.	Cov. B.	Spines	None	No.	18
Jones	Recess Flywheel 56 C, T	200	SP	Mo.	9.50	5.50	1	1	Steel	24	Var.	Var.	32	250	11.4	Ball.	Cov. B.	Spines	None	No.	20
Jones	Flat Flywheel 57 C, T	200	SP	Mo.	9.50	5.50	1	1	Steel	24	Var.	Var.	32	250	12.2	Ball.	Cov. B.	Spines	None	No.	21
Jones	40 T, B	520	SP	W-M	13.87	7.25	1	1	Steel	24	Var.	Var.	Var.	Var.	15.5	Ball.	Cov. B.	Spines	No.	No.	1,2,3	46	
Jones	37 T, B, Tr.	380	SP	W-M	12.87	7.00	1	1	Steel	24	Var.	Var.	Var.	Var.	14.5	Ball.	Cov. B.	Spines	No.	No.	1,2,3	39	
Lipe	13-2-6400 C, B, T, Tr	535	DP	W-M	12.87	7.25	2	2	Spec. I	1	465	2400	26.9	465	15.6	Ball.	Pins*	Spines	Shims	No.	1,2,3	72	
Lipe	14-SP-4200 C, B, T, Tr	360	SP	W-M	13.87	7.25	1	1	Spec. I	1	350	1920	17.4	350	15.6	Ball.	Lugs	Spines	Shims	No.	1,2,3	59	
Lipe	13-SP-3200 T, B, Tr	268	SP	W-M	12.87	7.25	1	1	Spec. I	1	350	1920	21.5	350	14.2	Ball.	Lugs	Spines	Shims	No.	1,2,3	47	
Lipe	12-SP-2400 T, B, Tr	200	SP	W-M	11.87	7.25	1	1	Spec. I	1	350	1920	27.8	350	13.6	Ball.	Lugs	Spines	Shims	No.			

AMERICAN STOCK

MAKE AND MODEL		Designed for	BEARINGS			Inside Distance Between Bearings on Main Shaft (Ins.)	Dist. Between Center Lines of Main and Sec'y Shafts (Ins.)	Number of Forward Speeds	Type of Direct Drive Clutch	TYPE OF GEAR TEETH USED FOR										MATERIAL			
			Type	Main Shaft	Pilot					Secondary Shaft	First Speed	Second Speed	Third Speed	Fourth Speed	Fifth Speed	Sixth Speed	Seventh Speed	Eighth Speed	Reverse	Countershaft Drive	Housing	Shaft S.A.E. No.	Gear S.A.E. No.
Brown-Lipe	1431	Buses	Con.	Ball.	Rol.	Rol.	4.00	3	G-T	Sp.	Hi.							Sp.	Hi.	CI	4615	4620	
Brown-Lipe	2252	Trucks	Con.	Ball.	Rol.	B&R	4.42	5	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	2253	Trucks	C&C	Ball.	Rol.	Ball.	4.42	5	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	2352	Trucks	Con.	Ball.	Rol.	B&R	4.75	5	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	2353	Trucks	Con.	Ball.	Rol.	B&R	4.75	5	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3241	Trucks	C&C	B&R	Rol.	Ball.	4.75	4	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3341	T. B.	C&C	B&R	Rol.	Ball.	4.75	4	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3440	Trucks	C&C	B&R	Rol.	Ball.	4.75	4	G-T	Sp.	Dir.	Hi.	Hi.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3352	Trucks	C&C	Ball.	Rol.	B&R	5.50	5	G-T	Sp.	Hi.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3353	Trucks	C&C	Ball.	Rol.	B&R	5.50	5	G-T	Sp.	Hi.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	3481	Trucks	C&C	B&R	Rol.	Ball.	4.75	8	G-T	Sp.	Hi.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5031	Buses	C&C	B&R	Rol.	Rol.	4.25	3	G-T	Sp.	Hi.				Hi.	Hi.	Hi.	Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5331	Buses	C&C	Ball.	Rol.	Ball.	4.75	3	G-T	Hi.	Hi.							Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5241	Trucks	C&C	B&R	Rol.	Ball.	5.50	4	G-T	Sp.	Hi.	Hi.						Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5341	T. B.	C&C	B&R	Rol.	Ball.	5.50	4	G-T	Sp.	Hi.	Hi.						Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5440	T. Tr.	C&C	B&R	Rol.	B&R	5.50	4	G-T	Sp.	Dir.	Hi.	Hi.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5251	Trucks	C&C	B&R	Rol.	Ball.	5.50	5	G-T	Sp.	Hi.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5351	Trucks	C&C	B&R	Rol.	Ball.	5.50	5	G-T	Sp.	Hi.	Hi.	Hi.	Hi.				Sp.	Hi.	CI	4615	4620	
Brown-Lipe	5352	Trucks	C&C	B&R	Rol.	Ball.	5.50	5	G-T	Sp.	Sp.	Hi.	Hi.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	6031	Trucks	Con.	Rol.	Rol.	Rol.	5.10	3	G-T	Hi.	Hi.							Sp.	Hi.	CI	4615	4620	
Brown-Lipe	7131	Buses	C&C	Ball.	Ball.	Rol.	6.50	3	G-T	Hi.	Hi.							Sp.	Hi.	CI	4615	4620	
Brown-Lipe	7241	T. B. Tr.	C&C	B&R	Ball.	B&R	6.50	4	G-T	Sp.	Hi.	Hi.	Dir.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	7341	T. B. Tr.	C&C	B&R	Ball.	B&R	6.50	4	G-T	Sp.	Hi.	Hi.	Dir.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	7440	T. Tr.	C&C	B&R	Ball.	B&R	6.50	4	G-T	Sp.	Dir.	Hi.						Sp.	Hi.	CI	4615	4620	
Brown-Lipe	7351	T. Tr.	Con.	B&R	Rol.	B&R	6.50	5	G-T	Sp.	Hi.	Dir.	Hi.					Sp.	Hi.	CI	4615	4620	
Brown-Lipe	222	T. Tr.	Con.	Ball.	Rol.	Rol.	4.00	2	G-T	Sp.	Dir.							Sp.	CI		3115	4620	
Brown-Lipe	221	T. Tr.	Con.	Ball.	Rol.	Rol.	4.00	2	G-T	Sp.	Dir.							Sp.	CI		3115	4620	
Brown-Lipe	3222	T. Tr.	Con.	Ball.	Ball.	Ball.	4.75	2	G-T	Hi.	Dir.							Sp.	CI		4615	4620	
Brown-Lipe	3221	T. Tr.	Con.	Ball.	Ball.	Ball.	4.75	2	G-T	Hi.	Dir.							Sp.	CI		4615	4620	
Brown-Lipe	5221	T. Tr.	Con.	Ball.	Ball.	Ball.	5.50	2	G-T	Hi.	Dir.							Sp.	CI		4615	4620	
Clark	B100	Trucks	Cl.	Ball.	Rol.	Rol.	9 1/8	4	G-T	Sp.	Sp.	Sp.	Dir.					Sp.	Sp.	CI	4620	2315	
Clark	B300	Trucks	Cl.	Ball.	Rol.	Rol.	5 1/8	4	G-T	Sp.	Sp.	Sp.	Dir.					Sp.	Sp.	CI	4620	VMA5	
Clark	R500	Trucks	C&C	Ball.	Rol.	B&R	10 1/8	5	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	2315	
Clark	R900	T. B.	C&C	Ball.	Rol.	B&R	12 3/8	5	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	VMA5	
Clark	AC300	Tr.	Cl.	Ball.	Rol.	Rol.	8 3/8	4	G-T	Sp.	Sp.	Sp.	Dir.					Sp.	Sp.	CI	4620	VMA5	
Clark	R100	T. B.	C&C	Ball.	Rol.	B&R	11 1/8	4	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	4320	
Clark	185F	Trucks	C&C	Ball.	Rol.	B&R	18 3/8	4	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	4620	
Clark	200V	T. B.	C&C	Ball.	Rol.	B&R	11 1/8	4	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	4620	
Clark	250V	T. B.	C&C	Ball.	Rol.	B&R	13 3/8	5	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	4620	
Clark	325V	T. B.	C&C	Ball.	Rol.	B&R	15 3/8	5	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	4620	
Clark	B710	Trucks	C&C	Ball.	Rol.	B&G	16 3/8	5	G-T	Sp.	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	4620	VMA5	
Cotta	A	T. B. Tr.	Con.	Ball.	Rol.	B&G	12 1/2	4	Jaw.	Sp.	Sp.	Sp.	Sp.					Sp.		SS	3120	3120	
Cotta	FA	T. Tr.	Con.	Ball.	Rol.	B&G	16 1/2	3	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	FAA	T. Tr.	Con.	Ball.	Rol.	B&G	8 1/2	1-2	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	JR		Con.	Ball.	Rol.	Rol.	5 3/8	1	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	RAU	T. Tr. B.	Con.	Ball.	Rol.	Ball.	11 1/2	3	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	SAU	T. Tr. B.	Con.	Ball.	Rol.	Ball.	13	3	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	TAU	T. Tr. B.	Con.	Ball.	Rol.	Ball.	14 1/2	3	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	T	T. Tr. B.	Con.	Ball.	Rol.	Ball.	18 1/2	3	Jaw.	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta	TS	T. Tr.	Con.	Ball.	Rol.	Ball.	7 1/4	1-2	Jaw.	Sp.	Sp.	Sp.	Sp.					Sp.		SS	3120	3120	
Cotta	ZA	Buses	C&C	Ball.	Rol.	Ball.	14	3	G-T	Sp.	Sp.	Sp.						Sp.		SS	3120	3120	
Cotta Gear	6U-4H	Trucks	Con.	Ball.	Rol.	Ball.	10 3/8	4	Jaw.	Sp.	He.	He.	He.					Sp.	He.	SS	2340	2320	
Cotta Gear	SU-5H	T. B.	Con.	Ball.	Rol.	Ball.	10 3/8	5	Jaw.	He.	He.	He.	He.	He.				Sp.	He.	SS	2340	2320	
Cotta Gear	65	T. B.	Con.	Ball.	Rol.	Ball.	12 3/8	5	Jaw.	He.	He.	He.	He.	He.				Sp.	He.	SS	2340	2320	
Cotta Gear	55	T. B.	Con.	Ball.	Rol.	Ball.	11 3/8	5	Jaw.	He.	He.	He.	He.	He.				Sp.	He.	SS	2340	2320	
Detroit	NL	Cars							G-T													4615	
Detroit	NC	Cars							G-T													4615	
Detroit	SM-400ZA	Cars	Syn.	Ball.	Rol.	Pla.	8 3/8	3	G-T	Sp.	Hi.	Sp.						Sp.	Hi.	CI	5140	5140	
Detroit	SM-400P	Cars	Syn.	Ball.	Rol.	Pla.	8 3/8	3	G-T	Sp.	Hi.	Sp.						Sp.	Hi.	CI	5140	5140	
Detroit	SM-400J	Cars	Syn.	Ball.	Rol.	Pla.	8 3/8	3	G-T	Sp.	Hi.	Sp.						Sp.	Hi.	CI	5140	5140	
Fuller	5-A-29	T. B. Tr.	C&C	Ball.	Rol.	Ball.	11.19	4.50	5	G-T	Sp.	Sp.	Hi.	Hi.	Dir.				Hi.	CI	2320	4620	
Fuller	5-A-290	T. B. Tr.	C&C	Ball.	Rol.	Ball.	11.19	4.50	5	G-T	Sp.	Sp.	Hi.	Hi.	Dir.				Hi.	CI	2320	4620	
Fuller	TDU	Taxi	Cl.	Ball.	Rol.	Rol.	6.12	5.83	3	G-T	Sp.	Sp.	Dir.						Hi.	CI	2320	4620	
Fuller	2-A-53	Trucks	Con.	Ball.	Rol.	Ball.	5.09	5.83	2	G-T	He.							Sp.	Sp.	CI	2320	2320	
Fuller	MHOG	Trucks	Cl.	Ball.	Ball.	Ball.	12.25	5.25	4	G-T	Sp.	Sp.	Sp.	Dir.				No.	Sp.	CI	2320	4620	
Fuller	5-A-530	T. B.	C&C	Ball.	Rol.	Ball.	15.31	5.83	5	G-T	Sp.	Sp.	Hi.	Dir.				Sp.	Sp.	CI	2320	2512	
Fuller	5-A-53	T. B.	C&C	Ball.	Rol.	Ball.	15.31	5.83	5	G-T	Sp.	Sp.	Hi.	Hi.	Hi.				Sp.	Sp.	CI	2320	4620
Fuller	5-A-380	T. B.	C&C	Ball.	Ball.	Ball.	13.25	5.41	5	G-T	Sp.	Sp.	Hi.	Hi.	Dir.				Sp.	Sp.	CI	2320	4620
Fuller	5-A																						

GEARSETS

Gear Teeth Pitch	Direct Drive On	GEAR RATIOS										Gearset Location	Control Location	Sold With Clutch	Standard Shift	Free Wheel Unit	Type of Free Wheel Unit	WEIGHT (Lbs.)			Recommended Type of Lubrication	MAKE AND MODEL
		Low	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	Overdrive							Cast Iron	Aluminum	Semi-Steel		
7-6	3	2.78	1.86	1.00						3.37		Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 1431	
7-6	4	7.32	4.25	2.21	1.40	1.00				7.32		Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 2252	
7-6	5	5.23	3.30	1.70	1.00	.78				5.23	.78	Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 2253	
6	5	7.70	4.55	2.35	1.45	1.00				7.70		Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 2352	
6	4	6.12	3.62	1.87	1.00	.79				6.12	.79	Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 2353	
6	4	7.00	3.90	1.91	1.00					8.10		Eng...	Ce.	Opt.	Y	No.		225		Oil.	Brown-Lipe... 3241	
6	4	6.30	3.51	1.68	1.00					7.29		Eng...	Ce.	Opt.	Y	No.		225		Oil.	Brown-Lipe... 3341	
6	3	3.87	1.86	1.00	.73					4.48	.73	Eng...	Ce.	Opt.	Y	No.		225		Oil.	Brown-Lipe... 3440	
6	5	7.93	4.58	2.47	1.46	1.00				7.93		Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 3352	
6	4	6.54	3.77	1.92	1.00	.77				6.54	.77	Eng...	Ce.	Opt.	Y	No.				Oil.	Brown-Lipe... 3353	
6	7	8.31	4.00	3.87	2.15	1.86	1.57	1.00	.73	9.62	.73	E-A.	Ce.	Opt.	Y	No.	360			Oil.	Brown-Lipe... 3481	
7-6	3	4.03	1.98	1.00						4.96		Eng...	C-S.	Opt.	Y	No.				Oil.	Brown-Lipe... 5031	
6	3	3.72	1.88	1.00						4.21		Eng...	Si.	Opt.	Y	No.				Oil.	Brown-Lipe... 5331	
6	4	7.14	3.44	1.84	1.00					8.11		Eng...	Ce.	Opt.	Y	No.	320			Oil.	Brown-Lipe... 5241	
6	4	6.63	3.20	1.70	1.00					7.53		Eng...	Ce.	Opt.	Y	No.	320			Oil.	Brown-Lipe... 5341	
6	3	3.90	1.88	1.00	.75					4.43	.75	Eng...	Ce.	Opt.	Y	No.	320			Oil.	Brown-Lipe... 5440	
6	4	7.14	3.44	1.84	1.00	.79				8.11	.79	Eng...	Ce.	Opt.	Y	No.	410			Oil.	Brown-Lipe... 5251	
6	4	6.63	3.20	1.70	1.00	.74				7.53	.74	Eng...	Ce.	Opt.	Y	No.	410			Oil.	Brown-Lipe... 5351	
6	5	7.70	4.85	2.56	1.43	1.00				5.54		Eng...	Ce.	No.	Y	No.	410			Oil.	Brown-Lipe... 5352	
6-5	2	2.22	1.00	.69							.69	Am.	Ce.	No.	Y	No.	200			Oil.	Brown-Lipe... 6031	
6	3	3.80	1.74	1.00						3.41		Am.	C-S.	Opt.	Y	No.				Oil.	Brown-Lipe... 7131	
6	4	7.10	3.89	1.96	1.00					9.24		E-A.	Ce.	Opt.	Y	No.	480			Oil.	Brown-Lipe... 7241	
6	4	6.27	3.43	1.73	1.00					8.15		E-A.	Ce.	Opt.	Y	No.	480			Oil.	Brown-Lipe... 7341	
6	3	3.72	2.04	1.00	.77					4.84	.77	Eng...	Ce.	Opt.	Y	No.	480			Oil.	Brown-Lipe... 7440	
6	4	6.27	3.43	1.73	1.00	.67				8.15	.67	Eng...	Ce.	Opt.	Y	No.	580			Oil.	Brown-Lipe... 7351	
6	2	1.52	1.00									Am.	Si.	No.	Y	No.	95			Oil.	Brown-Lipe... 222	
6	1	1.00	.75									Am.	Si.	No.	Y	No.	95			Oil.	Brown-Lipe... 221	
6	2	2.15	1.00									Am.	Ce.	No.	Y	No.	135			Oil.	Brown-Lipe... 3222	
6	1	1.00	.79									Am.	Ce.	No.	Y	No.	135			Oil.	Brown-Lipe... 3221	
6	2	2.34	1.00									Am.	Ce.	No.	Y	No.	190			Oil.	Brown-Lipe... 5221	
6°	4	6.50	4.00	2.08	Dir.					7.58		Eng...	Ce.	No.	Y	No.	180			Oil.	Clark... B100	
7°	4	6.57	3.58	1.73	Dir.					7.88		Eng...	Ce.	No.	Y	No.	145			Oil.	Clark... B300	
8.84°	5	7.23	4.32	2.24	1.42	Dir.				5.48		Eng...	Ce.	No.	Y	No.	155			Oil.	Clark... R500	
6.87°	5	8.13	4.04	2.38	1.43	Dir.				6.62		Eng...	Ce.	No.	Y	No.	285			Oil.	Clark... R900	
7	4	3.70	2.54	1.92						4.44		Eng...	Ce.	No.	Y	No.	105			Oil.	Clark... AC300	
8.82°	5	7.08	3.98	2.25	1.41	Dir.				5.66		Eng...	Ce.	No.	Y	No.	190			Oil.	Clark... R100	
7-9°	4	6.35	3.31	1.73	Dir.					7.54		Eng...	Ce.	No.	Y	No.				Oil.	Clark... 185P	
7-9°	5	7.58	4.38	2.40	1.48	Dir.				6.10		Opt...	Eng...	Ce.	No.	Y	No.	185			Oil.	Clark... 200V
7-9°	5	7.88	4.46	2.63	1.48	Dir.				7.88		Opt...	Eng...	Ce.	No.	Y	No.	290			Oil.	Clark... 250V
6-8	5	8.05	4.69	2.57	1.45	Dir.				8.05		Opt...	Eng...	Ce.	No.	Y	No.	350			Oil.	Clark... 325V
6-8°	4	6.50	3.82	1.67	Dir.					8.00	.79	Am.	Ce.	No.	Y	No.	420			Oil.	Clark... B710	
6-8	4	5.20	3.68	1.85	1.00					4.66		Eng...	Ce.	Opt.	Y	No.		165	NoF		Cotta... A	
4-5	3	4.00	2.00	1.00						4.12		Am.	Opt.	No.	No.	No.		675	NoF		Cotta... FA	
4-5	2	4.75	1.00							4.12		Am.	Opt.	No.	No.	No.		250	NoF		Cotta... FAA	
6-8	F									1.00		Eng...	Si.	Opt.	No.	No.		150	NoF		Cotta... JR	
5 1/2-7 1/2	3	3.68	1.85	1.0						4.66		Eng...	Ce.	Opt.	Y	No.		250	NoF		Cotta... RAU	
5-7	3	3.68	1.85	1.0						4.66		Eng...	Ce.	Opt.	Y	No.		325	NoF		Cotta... SAU	
4 1/2-6	3	5.20	2.5	1.0						4.66		Eng...	Ce.	Opt.	Y	No.		400	NoF		Cotta... TAU	
4 1/2-6	4	5.20	3.68	1.85	1.0					4.66		Am.	Opt.	No.	No.	No.		410	NoF		Cotta... T	
4 1/2-6	F	5.20	1.00							4.66		Am.	Opt.	No.	No.	No.		210	NoF		Cotta... TS	
6-8	3	2.88	1.56	1.00						4.46		Am.	Opt.	No.	No.	No.		325	NoF		Cotta... ZA	
7	4	7.4	3.20	1.57	1.00					7.4		Eng...	Ce.	No.	Y	No.				Oil.	Cotta Gear... 6U-4H	
6-8	5	8.5	4.63	2.92	1.59	1.00				9.0°		Eng...	Ce.	No.	No.	No.				Oil.	Cotta Gear... 8U-5H	
5-7	5	8.31	4.75	2.80	1.60	1.00				6.33°		Am.	Ce.	No.	No.	No.				Oil.	Cotta Gear... 65	
5 1/4	5	8.31	4.75	2.80	1.60	1.00				11.08°		Am.	Ce.	No.	No.	No.				Oil.	Cotta Gear... 55	
Var...	3	2.87	1.68	Dir.						3.75		Eng...	Si.	No.	Y	No.		93			Oil.	Detroit... NL
Var...	3	2.87	1.55	Dir.						3.75		Eng...	Ce.	No.	Y	No.		91			Oil.	Detroit... NC
Var...	3	2.87	1.55	Dir.						3.75		Eng...	Ce.	No.	Y	No.		89			Oil.	Detroit... SM-400ZA
7-8	5	7.53	4.30	2.52	1.42	1.00				5.96		Eng...	Ce.	Opt.	Y	No.		196			Oil.	Fuller... 5-A-29
7-8	4	6.10	3.48	2.04	1.00	.77				4.85	.77	Eng...	Ce.	Opt.	Y	No.		196			Oil.	Fuller... 5-A-290
6-8	3	2.88	1.60	Dir.						2.44		Eng...	Ce.	Y	No.	No.		120			Oil.	Fuller... TDU
Var...	2	1.58								No.		Am.	Si.	No.	No.	No.		150			Oil.	Fuller... 2-A-53
Var...	4	3.21	1.62	1.00	.74					4.06	.74	Am.	Top.	No.	No.	No.		215			Oil.	Fuller... MHOG
Var...	4	7.05	4.18	1.94	1.00	.79				7.53	.79	Eng...	Ce.	Opt.	Y	No.		330			Oil.	Fuller... 5-A-530
Var...	5	8.07	4.79	2.62	1.42	Dir.				8.62		Eng...	Ce.	Opt.	Y	No.		330			Oil.	Fuller... 5-A-53
Var...	4	7.00	4.18	1.93	Dir.	.78				7.18	.78	Eng...	Ce.	Opt.	Y	No.		287			Oil.	Fuller... 5-A-380
Var...	5	7.90	4.72	2.40	1.42	1.00				8.10		Eng...	Ce.	Opt.	Y	No.		287			Oil.	Fuller... 5-A-38
6-8	3	2.90	1.70	1.00						3.50		Eng...	Ce.	Y	Y	No.		163			Oil.	Fuller... TU
4 1/2-6	4	6.30	3.20	1.70	1.00					6.30		SU°	Ce.	Y	Y	No.		215°			Oil.	Fuller... MHU
5-7	4	6.36	3.57	1.78	1.00					7.85		Eng...	Ce.	Y	Y	No.						

AMERICAN AIRPLANE ENGINES

ENGINE MAKE AND MODEL	Department of Commerce License or A.T.C. No.	CYLINDER DATA										RATING			WEIGHTS		CARRU-RETORS		IGNITION SYSTEMS				STARTING		INSTALLATION DIMENSIONS				Price Complete at Factory																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Cooling Medium	Arrangement	Number of Cylinders	Total Piston Dis-Placement (Cu. Ins.)	Compression Ratio (to 1)	B.M.E.P. at Rated H.P. (Lbs. per Sq. In.)	Blower Ratio (to 1)	Cylinder Material	Number of Valves per Cylinder		Valve Location	Mile's Rated H.P. at Specified R.P.M.	Altitude or Sea Level	Octane Rating of Normal Crank-Case Oil	Propeller Drive	Consumption per Brake H.P. Hour	Gasoline (Lbs.)	Oil (Lbs.)	Engine Dry (Lbs.)	Per Rated H.P.	Number and Fuel Pump Supplied	Make	Current Sources	Spark Plug Make and Number	Cylinders per Cylinder	Method	Length (Ins.)		Height (Ins.)	Width (Ins.)	Height above Engine Bed	Center to Center Engine Beavers																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
										Intake	Exhaust																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Aeromarine	AR3	74	Air	Rad.	3-4 1/2 x 4	160	5.0	118	9	1	1	I	50-2100	SL	2100 D.	150	

[illegible]

For Specifications of Foreign Airplane Engines See Next Page

FOREIGN AIRPLANE ENGINES

ENGINE MAKE AND MODEL	CYLINDER DATA						RATING		CONSUMPTION		WEIGHTS		CARBURETORS		IGNITION SYSTEMS		STARTING		INSTALLATION DIMENSIONS (INS.)																		
	Arrangement	Number of Cylinders	Bore and Stroke (Ins.)	Total Displacement (Cu. Ins.)	Compression Ratio — to 1	Brake M.E.P. (Lbs. per Sq. In.)	Cylinder Material	Number of Valves per Cylinder		Valve Location	M.P.R. at Specified R.P.M.	Altitude (Ft.)	Normal Crankshaft R.P.M.	Propeller Drive	Per Brake H.P. Hour	Gasoline (Lbs.)	Oil (Lbs.)	Engine Dry (Lbs.)	Per Rated H.P. (Lbs.)	Make and Number Fitted	Fuel Pump Supplied?	Make	Current Source	Number	Spark Plug Make and Number per Cylinder	Make	Method	Length	Height	Overall	Width	Height Above Engine Bed	Center to Center of Engine Bore				
								Inlet	Exhaust																												
BRITISH																																					
A.B.C.	Hor.	4	4.2x4.8	244.0	5.60	130.0	10	1	1	OH.	75-1875 S.L.	1875 D.	N	BTH. Mag.	KIG-2	PS.	25.5	28.0	39.0	28.0	PS.	N	BTH. Mag.	Mag.	1	KIG-2	PS.	18.0	23.0	39.0	39.0	18.0	12.90				
A.B.C.	Hor.	2	4.2x3.6	91.8	6.00	127.8	10	1	1	OH.	34-2300 S.L.	2300 D.	N	BTH. Mag.	KIG-2	PS.	18.0	23.0	32.0	23.0	PS.	N	BTH. Mag.	Mag.	1	KIG-2	PS.	18.0	23.0	32.0	32.0	18.0	12.90				
Armstrong Sid.	Rad.	7	5.0x5.4	447.0	5.25	125.0	8	2	2	I.	185-2200 S.L.	2200 D.	55	55	55	55	332.0	332.0	41.40	33.0	55	N	BTH. Mag.	Mag.	2	KIG-2	55	38.61	45.61	41.40	41.40	38.61	17.15				
Genet. Maj. IV. C	Rad.	7	5.0x5.4	756.0	5.00	122.0	8	2	2	I.	185-2200 S.L.	2200 D.	50	50	50	50	515.0	515.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Lynx Mk. IV. C	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Cheetah Mk. V	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				
Armstrong Sid.	Rad.	7	5.25x5.50	834.0	5.20	131.0	8	2	2	I.	200-2100 S.L.	2100 D.	50	50	50	50	568.0	568.0	41.40	33.0	50	N	BTH. Mag.	Mag.	2	KIG-2	50	45.61	45.61	41.40	41.40	45.61	21.55				

[illegible]

ABBREVIATIONS:

General

Others Also

3.—Distance from Engine Plate to Rear of

Aircrew Hub

Supercharged

3.—Outside Diameter of Cylinders

4--No or None

~~Optional~~

Oil-Sea Level

/a--Various

Yes

Cylinder Arrangement

4—Four Banks of Four Cylinders Each in

H Formation

100

1

AUTOMOTIVE DIESEL AND OTHER HEAVY OIL ENGINES

ENGINE MAKE AND MODEL	Designed for	Type	Number of Cylinders	Bore and Stroke	Piston Displacement (Cu. Ins.)	Manufacturers Rated HP at Specified R.P.M.	Compression Ratio to 1	Specified R.P.M. at Maximum Pressure (Lbs. per Sq. In.)	Maximum Pressure (Lbs. per Sq. In.)	B.M.E.P. at Maximum HP (Lbs. per Sq. In.)	Weight per Rated HP (Lbs.)	Maximum Torque in Lbs. Ft. at Specified R.P.M.	Engine Weight (Lbs.)	VALVES (4 Cycle)				PISTON			CONNECTING RODS			INJECTION VALVE		STARTING EQUIPMENT			
														Inlet Port Diameter and Lift (Ins.)	Exhaust Port Diameter and Lift (Ins.)	Inlet Seat Angle (Deg.)	Exhaust Seat Angle (Deg.)	Material	Number of Rings per Piston	Length (Ins.)	Weight of Piston with Rings and Pin (Lbs.)	Material (S.A.E. No.)	Center to Center Length	Weight with Cap and Bushing (Lbs.)	Type (Open or Closed)		Orifices (Single or Multiple)	Injection Pressure (Lbs. per Sq. In.)	Specific Fuel Consumption (Lbs. per B.H.P. Hr.)	Make
AMERICAN																													
Amer. Monovalve... 2-35 Marine	DI	2-5 1/2 x 7	332.5	35-1200	15.0	500-1200	750	70	48.5	102-1200	1700	1700	2- 3/4	2- 3/4	30	30	Al.	5	8.0	10.0	Ch.M.	13.5	13.00	Clo.	5	1500	44	D.R.	Elec.
Amer. Monovalve... 4-75 T.B.M.	DI	4-8 1/2 x 7	665.0	75-1200	15.0	500-1200	750	76	22.6	330-1200	1900	1900	2- 3/4	2- 3/4	30	30	Al.	5	8.0	10.0	Ch.M.	13.5	13.00	Clo.	5	1500	44	D.R.	Elec.
Amer. Monovalve... 6-125 T.B.M.	DI	6-10 1/2 x 7	997.5	115-1200	15.0	500-1200	750	76	22.6	330-1200	1900	1900	2- 3/4	2- 3/4	30	30	Al.	5	8.0	10.0	Ch.M.	13.5	13.00	Clo.	5	1500	44	D.R.	Elec.
Atlas... Imp. Aimee M.Ind.	DI	4-8 1/2 x 6 1/2	460.0	40-950	15.0	400-950	700	73	54.6	330-600	2185	2185	1 1/2 - 4 3/4	1 1/2 - 4 3/4	45	45	Al.	6	6 1/4	11.4	1045	11.0	10.80	Op.	M.	2000	41	L-N	Elec.
Buda... 6D-415 T.B.M.	A	6-10 1/2 x 7	415.0	85-2000	16.0	400-600	700	81	15.9	290-1200	1350	1350	1 1/2 - 4 3/4	1 1/2 - 4 3/4	45	45	Al.	6	6 1/4	5.50	6149	4.75	10.80	Op.	M.	2000	47	L-N	Elec.
Buda... 6DM-1611 Marine	A	6-8 1/2 x 8 1/2	1611.0	104-1200	14.0	400-600	550	75	25.9	290-1200	2700	2700	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... 6DMR-6-17 Marine	A	6-8 1/2 x 7	1742.0	165-1000	15.0	400-600	700	74	43.0	1085-650	6450	6450	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... 6DMR-6-17 Marine	A	6-8 1/2 x 7	1742.0	165-1000	15.0	400-600	700	75	43.0	1130-650	7100	7100	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... D-4-23 T.R.	A	4-8 1/2 x 7	909.0	104-1200	14.0	400-600	550	75	31.0	290-1200	1350	1350	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... D-4-30 T.R.	A	4-8 1/2 x 8 1/2	1160.0	104-1200	14.0	400-600	550	75	31.0	290-1200	1350	1350	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... D-6-27 R.Ind.	A	6-8 1/2 x 8 1/2	1610.0	104-1200	14.0	400-600	550	75	31.0	290-1200	1350	1350	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Buda... D-6-30 T.R.	A	6-8 1/2 x 8 1/2	1740.0	104-1200	14.0	400-600	550	75	31.0	290-1200	1350	1350	2 1/4 - 5 1/2	2 1/4 - 5 1/2	45	45	Al.	6	10 1/2	21.0	1055	17 1/4	27.00	Clo.	2	2000	47	L-N	Elec.
Caterpillar... D7700 T.R.	PC	4-8 1/2 x 8	693.0	50-850	15.5	570-850	550	75	88.5	440-600	4433	4433	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	7	9 1/2	11.37	1040	15.0	15.31	Clo.	2	1800	495	Own.	Gas
Caterpillar... D11000 T.R.	PC	6-8 1/2 x 8	1083.0	75-820	15.5	570-820	550	75	88.5	440-600	4867	4867	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	7	9 1/2	11.37	1040	15.0	15.31	Clo.	2	1800	444	Own.	Gas
Caterpillar... D8300 T.R.	PC	4-8 1/2 x 8	831.0	64-900	15.5	570-900	600	68	65.0	710-600	4867	4867	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	7	9 1/2	11.37	1040	15.0	15.31	Clo.	2	1800	444	Own.	Gas
Caterpillar... D13000 T.R.	PC	6-8 1/2 x 8	1246.0	95-900	15.5	570-900	600	68	65.0	710-600	4867	4867	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	7	9 1/2	11.37	1040	15.0	15.31	Clo.	2	1800	444	Own.	Gas
Caterpillar... D6100 T.R.	PC	3-8 1/2 x 8	520.0	37-850	15.5	570-850	600	67	96.1	805-600	3649	3649	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	7	9 1/2	11.37	1040	15.0	15.31	Clo.	2	1800	485	Own.	Gas
Continental... D2 M.R.	AC	10-10 1/2 x 7 1/2	2490.0	635-1400	15.5	600-1400	850	144	61.5	320-600	3000	3000	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Cummins... 6-K M.R.Ind.	PC	6-8 1/2 x 9	1833.0	210-1000	14.0	450-1000	700	86	33.7	1280-600	7075	7075	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Cummins... 6-L M.R.Ind.	PC	6-8 1/2 x 10	2309.0	250-1000	14.0	450-1000	700	86	33.7	1280-600	7075	7075	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Cummins... 6-KO M.R.Ind.	PC	6-8 1/2 x 9	2078.0	230-1000	14.0	450-1000	700	86	33.7	1280-600	7075	7075	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Cummins... 6-H T.B.M.R.	PC	6-8 1/2 x 6	672.0	125-1800	17.0	500-1800	750	82	18.7	450-600	1950	1950	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Cummins... 4-4 1/2 x 6	PC	4-4 1/2 x 6	448.0	83-1800	17.0	500-1800	750	82	18.7	450-600	1950	1950	2 1/2 - 5 1/2	2 1/2 - 5 1/2	45	45	Al.	5	8 1/2	12.0	3240	19	15.31	Clo.	M.	5000	45	Opt.	Opt.
Fairbanks Morse... 36A-4 1/2 Marine	TC	4-4 1/2 x 6	520.0	60-1200	16.0	580-1200	800	70	42.5	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Guiberson... GH-15 M.Ind.	TC	4-4 1/2 x 6	425.0	45-1200	16.0	580-1200	800	70	42.5	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Guiberson... GH-25 R.Ind.	TC	4-5 1/2 x 7 1/2	845.0	65-900	16.0	540-900	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hill... 8-5 1/2 x 7	PC	8-5 1/2 x 7	824.0	1000	15.0	500-1000	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hill... 4-3 1/2 x 6	PC	4-3 1/2 x 6	230.8	40-2000	15.0	500-2000	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hill... 6-5 1/2 x 6	PC	6-5 1/2 x 6	346.2	60-2000	15.0	500-2000	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hill... 8-5 1/2 x 6	PC	8-5 1/2 x 6	1069.2	200-1600	15.0	500-1600	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hercules... DXHE	PC	6-5 1/2 x 6 1/2	707.0	125-2200	15.0	500-2200	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Hercules... DXH	PC	6-5 1/2 x 6 1/2	474.0	125-2200	15.0	500-2200	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Kermath... DRX	PC	6-5 1/2 x 6 1/2	474.0	125-2200	15.0	500-2200	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Kermath... DRX	PC	6-5 1/2 x 6 1/2	474.0	125-2200	15.0	500-2200	800	67	40.0	335-1200	2550	2550	1 1/2 - 4 1/2	1 1/2 - 4 1/2	45	45	Al.	4	8 1/2	8.0	1045	12.0	13.00	Clo.	S.	1500	48	L-N	Elec.
Red Wing... 30 Hp. Marine	PC	4-3 1/2 x 4 1/2	310.0	14-1600	17.0	500-1600	800	67	40.0	335-1200	2550	2550	1																

Beardmore	4M6 Marine	DI	4-4-14-6	342.0	55-1600	14.0	450-500	25.5	200-1100	14.87	5.00	St.	11.80	2000	43	Opt.
Beardmore	6M6 Marine	DI	4-4-14-6	513.0	610-1200	14.0	450-500	25.5	200-1100	17.93	5.00	St.	11.80	2000	43	Opt.
Beardmore	12 M.R.	DI	4-6-22-7.5	740.0	105-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	13 M.R.	DI	4-6-22-7.5	505.0	150-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	14 M.R.	DI	4-6-22-7.5	894.0	220-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	15 M.R.	DI	4-6-22-7.5	1192.0	275-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	16 M.R.	DI	4-6-22-7.5	1758.0	440-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	17 M.R.	DI	4-6-22-7.5	2564.0	440-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	18 M.R.	DI	4-6-22-7.5	3946.0	440-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	19 M.R.	DI	4-6-22-7.5	5128.0	440-1200	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	20 M.R.	DI	4-6-22-7.5	7692.0	720-900	13.9	430-480	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	21 M.R.	DI	4-6-22-7.5	604.8	60-1000	14.0	420-1000	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	22 M.R.	DI	4-6-22-7.5	235.6	22-1200	14.0	420-1000	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	23 M.R.	DI	4-6-22-7.5	220.9	52-2200	14.0	420-1000	27.2	300-1100	17.93	5.00	St.	13.30	2000	42	Opt.
Beardmore	24 M.R.	DI	4-6-22-7.5	371.0	68-1700	15.9	590-1000	77.0	84	20.8	208.4	1000	1372	1372	1372	1372
Beardmore	25 M.R.	DI	4-6-22-7.5	551.7	100-1700	15.9	590-1000	77.0	84	20.8	208.4	1000	1372	1372	1372	1372
Beardmore	26 M.R.	DI	4-6-22-7.5	186.0	50-2500	17.0	575-1000	850	90	18.0	325-1000	1586	190	190	190	190
Beardmore	27 M.R.	DI	4-6-22-7.5	330.0	76-2000	16.5	550-1000	850	90	18.0	325-1000	1586	190	190	190	190
Beardmore	28 M.R.	DI	4-6-22-7.5	495.0	112-2000	16.5	550-1000	850	90	18.0	325-1000	1586	190	190	190	190
Beardmore	29 M.R.	DI	4-6-22-7.5	257.0	68-2000	17.5	575-1000	850	90	18.0	325-1000	1586	190	190	190	190
Beardmore	30 M.R.	DI	4-6-22-7.5	301.0	60-2000	15.0	490-1500	800	79	17.7	170-1500	1060	190	190	190	190
Beardmore	31 M.R.	DI	4-6-22-7.5	87.5	9-1000	15.0	490-1500	800	79	17.7	170-1500	1060	190	190	190	190
Beardmore	32 M.R.	DI	4-6-22-7.5	176.5	45-2500	15.0	490-1500	800	79	17.7	170-1500	1060	190	190	190	190
Beardmore	33 M.R.	DI	4-6-22-7.5	212.0	37-2500	15.0	490-1500	800	79	17.7	170-1500	1060	190	190	190	190
Beardmore	34 M.R.	DI	4-6-22-7.5	316.5	62-1500	17.0	500-1400	720	88	18.8	300-1300	1375	160	160	160	160
Beardmore	35 M.R.	DI	4-6-22-7.5	460.0	150-1000	15.0	490-1500	850	90	18.8	300-1300	1375	160	160	160	160
Beardmore	36 M.R.	DI	4-6-22-7.5	1049.0	112-1000	15.0	490-1500	850	90	18.8	300-1300	1375	160	160	160	160
Berliet	T.T.B.M.R.	AC	4-3 94x5.52	298.0	49-1900	15.0	497-	582	144-1100	1080	6.50	5.52 C.N.S.	11.23	6.98 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	6-5 12x7.08	572.0	125-1500	15.0	497-	582	470-1200	2730	7.29	11.50 C.N.S.	13.80	12.82 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	6-4 32x5.90	525.0	150-1500	15.0	497-	582	292-1300	1890	6.89	7.35 C.N.S.	12.30	8.97 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	6-4 32x5.90	348.0	150-1500	15.0	497-	582	188-1300	1255	6.89	7.35 C.N.S.	12.30	8.97 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	6-4 72x6.30	660.0	500-1700	15.0	497-	582	346-1300	2110	7.48	9.43 C.N.S.	12.00	11.38 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	2-2 85x8.28	164.5	24-1450	15.0	497-	582	160	31.7	1012	2 Cycle	11.95	7.70 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	2-3 35x9.45	165.5	60-1500	15.0	497-	582	163	21.3	1012	2 Cycle	11.95	7.70 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	2-3 35x11.8	207.9	45-1200	15.0	497-	582	163	21.3	1012	2 Cycle	11.95	7.70 Clo.	S	PR
Berliet	T.T.B.M.R.	AC	2-3 35x11.8	519.4	105-1800	15.0	497-	582	712	88	18.8	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Berliet	T.T.B.M.R.	AC	2-3 35x11.8	348.0	70-1800	15.0	497-	582	712	88	18.8	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Berliet	T.T.B.M.R.	AC	4-3 74x5.91	270.0	45-1800	16.0	498-1000	555	73	23.5	141-1300	1056	1.58-35	1.58-35	1.58-35	1.58-35
Berliet	T.T.B.M.R.	AC	4-3 74x5.91	506.0	70-1800	16.0	498-1000	555	73	23.5	141-1300	1056	1.58-35	1.58-35	1.58-35	1.58-35
Berliet	T.T.B.M.R.	AC	4-4 92x6.70	764.0	120-1500	16.0	498-1000	783	78	22.3	319-1100	1780	1.97-39	1.97-39	1.97-39	1.97-39
Berliet	T.T.B.M.R.	AC	4-4 92x6.70	524.0	120-1500	16.0	498-1000	783	78	22.3	319-1100	1780	1.97-39	1.97-39	1.97-39	1.97-39
Berliet	T.T.B.M.R.	AC	6-4 74x6.50	524.0	95-1600	16.0	515-1600	665	90	17.6	325-1000	1670	1.50-40	1.50-40	1.50-40	1.50-40
Berliet	T.T.B.M.R.	AC	4-4 33x5.12	302.0	62-2000	17.0	520-2000	700	81	14.8	180-1200	920	1.50-40	1.50-40	1.50-40	1.50-40
Bussing-Nag	C.T.T.B.R.	PC	4-4 34x5.12	301.5	55-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	4-4 34x5.12	500.0	70-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	4-5 12x6.70	550.0	80-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	6-4 24x5.12	453.0	80-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	6-4 24x5.12	765.0	110-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	6-5 12x6.70	826.0	135-1500	16.5	499-1200	641	96	21.2	165-600	1165	1.89-41	1.89-41	1.89-41	1.89-41
Bussing-Nag	C.T.T.B.R.	PC	6-5 12x6.70	244.0	95-2000	18.0	512-2000	712	81	16.7	159-1500	836	2.28-41	2.28-41	2.28-41	2.28-41
Bussing-Nag	C.T.T.B.R.	PC	3-4 73x6.70	351.0	66-4-1500	18.0	512-2000	712	81	16.7	159-1500	836	2.28-41	2.28-41	2.28-41	2.28-41
Bussing-Nag	C.T.T.B.R.	PC	4-3 94x6.30	304.8	63-2000	18.0	512-2000	712	81	16.7	159-1500	836	2.28-41	2.28-41	2.28-41	2.28-41
Bussing-Nag	C.T.T.B.R.	PC	6-6 95x7.87	1665.3	150-1500	17.5	576-1000	640	71	40.6	780-1000	910	2.36-59	2.36-59	2.36-59	2.36-59
Bussing-Nag	C.T.T.B.R.	PC	2-3 35x9.45	166.5	60-1500	17.0	576-1000	640	71	40.6	780-1000	910	2.36-59	2.36-59	2.36-59	2.36-59
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	332.0	110-1500	17.0	576-1000	640	71	40.6	780-1000	910	2.36-59	2.36-59	2.36-59	2.36-59
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	438.0	165-1500	17.0	576-1000	640	71	40.6	780-1000	910	2.36-59	2.36-59	2.36-59	2.36-59
Bussing-Nag	C.T.T.B.R.	PC	6-3 94x9.45	438.0	165-1500	17.0	576-1000	640	71	40.6	780-1000	910	2.36-59	2.36-59	2.36-59	2.36-59
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	511.0	120-1500	18.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	260.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.	PC	4-3 35x9.45	278.0	60-1500	16.0	588-1100	732	12.7	208.3-1000	1144	1.77-45	1.77-45	1.77-45	1.77-45	1.77-45
Bussing-Nag	C.T.T.B.R.</															

Continued on next page

AUTOMOTIVE DIESEL AND OTHER HEAVY OIL ENGINES—Continued

ENGINE MAKE AND MODEL	Designed for	Type	Number of Cylinders—Bore and Stroke	Piston Displacement (Cu. Ins.)	Manufacturers Rated HP. at Specified R.P.M.	Compression Ratio to 1	GENERAL							VALVES (4 Cycle)				PISTON				CONNECTING RODS			INJECTION VALVE				STARTING EQUIPMENT		
							Specified R.P.M.	Maximum Pressure (Lbs. per Sq. In.)	B.M.E.P. at Maximum HP. (Lbs. per Sq. In.)	Weight per Rated HP. (Lbs.)	Maximum Torque in Lbs. Ft. at Specified R.P.M.	Engine Weight Complete (Lbs.)	Inlet Port Diameter and Lift (Ins.)	Exhaust Port Diameter and Lift (Ins.)	Inlet Seat Angle (Deg.)	Exhaust Seat Angle (Deg.)	Material	Number of Rings per Piston	Length (Ins.)	Weight of Piston with Rings and Pin (Lbs.)	Material (S.A.E. No.)	Center to Center Length	Weight with Cap and Bushing (Lbs.)	Type (Open or Closed)	Orifices (Single or Multiple)	Injection Pressure (Lbs. per Sq. In.)	Specific Fuel Consumption (Lbs. per B.H.P. Hr.)	Make			
GERMAN (Cont.)																															
Vomag.....4R3080 C.Buses.....		TC.....	4-5.12x7.10	592.0	90-1600	14.7	384-	683	75	19.8	325-1100	1780	2.17-47	2.17-47	45	45	Al.	4	7.69	7.49	14.6	11.0	Op.	S.....	950	.48	Bos.....	Elec.....	
Vomag.....6R1060 C.Buses.....		TC.....	6-4.34x6.31	556.0	100-1900	14.4	427-	684	75	18.6	324.5-1400	1860	1.77-47	1.97-47	45	45	Al.	4	4.50	4.51	12.8	7.92	Op.	S.....	955	.47	Bos.....	Elec.....	
Vomag.....6R3080 C.Buses.....		TC.....	6-5.12x7.10	875.0	130-1800	14.7	384-	682	74	19.0	476-1100	2475	2.17-47	2.17-47	45	45	Al.	4	7.68	7.48	14.6	11.0	Op.	S.....	955	.47	Bos.....	Elec.....	
ITALIAN																															
Fiat.....324 T.Buses.....		TC.....	4-4.26x4.93	379.0	55-2200	17.4	427-2200	998	52	23.6	141-1500	1300	1.65-45	1.54-45	45	45	Al.	6	17.05	3.17	St.....	11.25	6.32	Clo.	S.....	1470	.46	Ow.....	Elec.....	
Fiat.....350C Trucks.....		DI.....	4-4.26x5.99	340.0	60-1800	16.0	427-1800	1068	78	25.5	187.5-1000	1530	1.85-45	1.68-41	45	45	Al.	6	6.50	3.65	St.....	12.50	7.35	Clo.	M.....	2205	.41	Ow.....	Elec.....	
Fiat.....355C T.B.Railcar.....		DI.....	6-4.26x5.99	510.0	80-1700	16.0	427-1700	1068	73	24.4	267-1200	1948	1.85-45	1.68-41	45	45	Al.	6	6.50	3.65	St.....	12.50	7.35	Clo.	M.....	2205	.41	Ow.....	Elec.....	
Fiat.....355DA B.Railcar.....		TC.....	6-4.54x6.30	608.5	110-1800	17.4	427-1800	996	79	17.5	325-1300	1925	1.65-49	1.65-49	45	45	Al.	6	5.80	3.83	St.....	13.00	8.36	Clo.	S.....	1470	.44	Ow.....	Elec.....	
Fiat.....356 Buses.....		TC.....	6-4.54x6.30	608.5	115-1800	17.4	427-1800	996	83	18.2	354-1400	2090	1.65-49	1.65-49	45	45	Al.	6	6.85	4.89	St.....	13.00	6.36	Clo.	S.....	1470	.44	Ow.....	Elec.....	
SWEDISH																															
Penta-Hesselman...HA6 Marine.....		DI.....	6-3.50x4.34	250.0	42-1830	6.0	74	13.1	20-1000	550	1.34-34	1.34-34	45	45	Al.	4	4.72	1.96	St.....	9.85	2.95	Op.	M.....35	Bos.....	Opt.....	
Penta-Hesselman...PG3 Marine.....		DI.....	6-4.54x5.67	547.0	100-1600	6.75	90	9.0	48-1200	900	1.89-51	1.89-51	30	30	Al.	5	6.10	4.40	St.....	11.80	6.60	Op.	M.....63	Bos.....	Opt.....	
SWISS																															
Saurer.....BZD M.Railcar.....		DI.....	12-5.12x7.10	1750.0	360-1500	15.4	455-1500	854	109	13.7	1343-1000	4840	1.65-47	1.65-47	90	90	5	8.27	9.20	NIS.....	14.60	13.62	Clo.	M.....	2500	.37	Opt.....	Elec.....	
Saurer.....BUD T.B.Railcar.....		DI.....	6-4.73x5.70	704.0	140-1600	15.5	455-1600	854	99	16.5	550-1100	2310	1.64-45	1.64-45	90	90	5	7.00	7.09	NIS.....	14.20	10.40	Clo.	M.....	2500	.37	Opt.....	Elec.....	
Saurer.....BUD T.B.Railcar.....		DI.....	6-4.73x5.92	822.0	115-1600	15.5	454-1600	854	97	15.3	568-1100	1760	1.80-35	1.80-35	90	90	5	7.50	5.44	NIS.....	13.40	10.05	Clo.	M.....	2500	.41	Opt.....	Elec.....	
Saurer.....CRD T.B.Railcar.....		DI.....	6-4.73x5.12	574.0	150-1600	16.0	454-1600	854	108	16.8	173-1200	925	1.80-34	1.80-34	90	90	5	6.99	8.18	NIS.....	10.52	6.90	Clo.	M.....	2500	.41	Opt.....	Elec.....	
Saurer.....BUD T.B.Railcar.....		DI.....	6-4.73x5.10	574.0	150-1600	15.4	455-1600	854	109	14.6	671-1000	2350	1.65-47	1.65-47	90	90	5	8.27	9.20	NIS.....	13.20	10.05	Clo.	M.....	2500	.37	Opt.....	Elec.....	
Saurer.....BUD T.B.Railcar.....		DI.....	6-4.73x5.10	574.0	150-1600	15.4	455-1600	854	95	17.0	253-1150	1320	1.80-36	1.80-36	90	90	5	7.29	5.43	NIS.....	13.40	10.40	Clo.	M.....	2500	.41	Opt.....	Elec.....	
S. L. M.....6TV18 Railcars.....		DI.....	6-7.10x8.67	3420.0	150-850	499-850	741	41	33.7	555-500	5006	2.16-	2.16-	225	250	Al.....	6	9.45	2.80	CHNI.....	18.90	2.65	Clo.	M.....	7380	.40	Ow.....	Opt.....	
ABBREVIATIONS:																															
1-Also Built in 2, 3 & 4 Cylinders																															
1-Also Built in 3 Cylinders																															
1-Also Built in 3, 4 & 5 Cylinders																															
1-CR Series also Built with 3 Cylinders																															
1a-LC Series also Built in 3 & 4 Cylinders																															
1-Under Waukena-Hesselman License																															
1-Also Built in 1, 2, 3, 4 and 5 Cylinders																															
1-Also Built in 1, 2 and 3 Cylinders																															
1-Also Built with 6 Cylinders																															
1-Also Built with 4, 6 & 8 Cylinders																															
1-Also Built with 6 Cylinders																															
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ABBREVIATIONS:

- 1—Also Made in 1, 2, 3, & 4 Cylinders
- 2—These Engines Range from 3 to 8 Cylinders
- 3—Mfg. Under Waukena-Hesselman License
- 4—Also Built in 1, 2, 3, 4 and 5 Cylinders
- 5—Also Built in 1, 2 and 3 Cylinders

- AC—Air Chamber
- AL—Aluminum
- AL—Alloy Steel
- B—Buses
- BN—Bunkie Nickel Alloy
- BS—Bosch
- CH—Chromolite Molybdenum
- CI—Cast Iron
- CI—Cast Iron Tilted

- Cle—Closed
- CNM—Chrome Nickel Molybdenum
- CNS—Carbon Steel
- CS—Carbon Steel
- DI—Direct Injection
- D-R—Delco-Remy
- Elec—Electric
- Elek—Elektron Metal
- Gas—Gas Engine

- Ind—Industrial
- L-N—Leece-Neve
- M—Marine
- M—Multiple
- NI—Nickel Iron
- NIS—Nickel Steel
- Op—Open
- PC—Precombustion Chamber
- T—Tractors
- T—Tractors

- PR—Paris-Rhone
- R—Railcars
- S—Single
- SH—Silicon Alloy
- SS—Semi-Steel
- St—Steel
- T—Trucks
- T—Tractors

The following Buda engine models arrived too late for insertion in the stock engine table:

No. of cyls.	4	6	4	6	4	4	4	Trucks, Buses
Bore	5 1/2	5 1/2	6	6	6 1/4	6 1/4	6 1/4	Tractors
Stroke	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	Tractors
Piston Disp.	677	1033	806	1230	870	870	870	Tractors
HP. Rating	85-1200	129-1200	115-1200	188-1400	108-1000	108-1000	108-1000	Tractors
Comp. Ratio	4.6	4.6	4.7	4.7	4.6	4.6	4.6	Tractors
Designed for—	Tractors	Tractors	Tractors	Tractors	Industrial	Industrial	Industrial	Tractors

AMERICAN TWO CYCLE OUTBOARD MOTORS

MAKE AND MODEL	Power Head	No. of Cylinders	Bore and Stroke (Ins.)	Piston Displacement (Cu. Ins.)	N.O.A. Certified Brake HP.	R.P.M.	Weight (Lbs.)	Piston Rings No. and Size	Propeller Diameter Pitch (Ins.)	Starting Device	Fuel Tank Capacity (Gals.)	Gear Ratio	Ignition System Type	Carburetor Make	Spark Plug Make and Model	Type of Exhaust	Cooling System
Evinrude-Elto Sportsman	R. V.-2 Port...	1	2x1½	5	2.2	3500	34	2-½	7½x6	Cord...	4325	13-20	Magneto...	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Lightwin	R. V.-2 Port...	2	2x1½	10	5.1	3750	38	2-½	8x8	Cord...	34	13-20	Mag. or Bat.	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Fisherman	C. V.-2 Port...	2	2x1½	10	4.0	3250	39	2-½	7½x8	Cord...	34	13-20	Mag. or Bat.	Own...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Lightwin Imp.	R. V.-2 Port...	2	2x1½	10	5.5	4000	42	2-½	8½x8	Cord...	34	11-17	Mag. or Bat.	Tillotson...	AC-G-5...	Underwater.	Pump...
Evinrude-Elto Fleetwin	R. V.-2 Port...	2	2½x1½	15	8.5	4000	66	2-½	9x8	Cord...	1½	13-19	Mag. or Bat.	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Fleetwin	R. V.-2 Port...	2	2½x1½	15	8.5	4000	98	2-½	9x7½	Electric...	1½	13-19	Mag. or Bat.	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Light Four Imp.	R. V.-2 Port...	4	1½x1½	15	9.2	4000	55	3-½	8½x9	Cord...	1½	11-17	Mag. or Bat.	Tillotson...	AC-G-5...	Underwater.	Pump...
Evinrude-Elto Sportfour	R. V.-2 Port...	4	2x2	25	16.2	4000	85	2-½	10x10	Cord...	2½	13-19	Mag. or Bat.	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Sportfour	R. V.-2 Port...	4	2x2	25	16.2	4000	119	2-½	10x10	Electric...	2½	13-19	Mag. or Bat.	Tillotson...	Ch. 18-S1...	Underwater.	Pump...
Evinrude-Elto Speeditwin	R. V.-2 Port...	2	2½x2½	30	21.1	4000	98	2-½	11x11	Cord...	2½	15-21	Mag. or Bat.	Own...	Ch. R-7...	Underwater.	Pump...
Evinrude-Elto Speeditwin	R. V.-2 Port...	2	2½x2½	30	21.1	4000	129	2-½	11x11	Electric...	2½	15-21	Mag. or Bat.	Own...	Ch. R-7...	Underwater.	Pump...
Evinrude-Elto Racing Sp'd in	R. V.-2 Port...	2	2½x2½	30	30.6	6000	93	2-½	9½x16	Cord...	2½	13-22	Mag. or Bat.	Optional...	Ch. R-1...	Underwater.	Pump...
Evinrude-Elto Speedquad	R. V.-2 Port...	4	2½x2½	50	31.2	4000	125	2-½	10½x13	Cord...	4	15-21	Mag. or Bat.	Tillotson...	Ch. R-7...	Underwater.	Pump...
Evinrude-Elto Speedquad	R. V.-2 Port...	4	2½x2½	50	31.2	4000	157	2-½	10½x13	Electric...	4	15-21	Mag. or Bat.	Tillotson...	Ch. R-7...	Underwater.	Pump...
Evinrude-Elto Racing 460	Rotary Valve	4	2½x2½	60	59.3	5500	134	2-½	10½x18	Cord...	4	13-19	Mag. or Bat.	Optional...	Ch. R-1...	Underwater.	Pump...
Evinrude-Elto Midget Racer	Rotary Valve	2	1½x1½	7½	6.0	5000	37	3-½	6½x8½	Cord...	500	13-20	Mag. or Bat.	Tillotson...	Ch. R-1...	Underwater.	Pump...
Evinrude-Elto All Electric							60		8x8	Switch...		13-20	Mag. or Bat.			Underwater.	Pump...
Johnson Seahorse J-75	N. V.-3 Port...	1	2x1½	4.71	1.4	3000	29½	3-½	8x8	Cord...	4*	14-25	Magneto...	Own...	18 MM.	Muffler...	Pump...
Johnson Seahorse F-75	N. V.-3 Port...	2	2x1½	9.42	3.3	3000	42½	3-½	8x9	Cord...	7*	14-25	Magneto...	Own...	18 MM.	Muffler...	Pump...
Johnson Seahorse 300	R. V.-2 Port...	2	1½x1½	7.59	3.7	4000	37	2-½	8x6¼	Cord...	6½*	14-25	Magneto...	Own...	14 MM.	Muffler...	Pump...
Johnson Seahorse A-75	R. V.-2 Port...	2	1½x1½	8.28	4.5	4000	43	2-½	9½x6	Cord...	7*	14-24	Magneto...	Own...	18 MM.	Underwater.	Pres. Vac.
Johnson Seahorse K-75	R. V.-2 Port...	2	2½x1½	14.00	9.3	4000	64	2-½	9½x9	Cord...	13*	14-24	Magneto...	Own...	18 MM.	Underwater.	Pres. Vac.
Johnson Seahorse P-75	R. V.-2 Port...	2	2½x2.52	30.00	22.0	4000	109	2-½	12" diam	Cord...	2½	12-21	Magneto...	Own...	18 MM.	Underwater.	Pres. Vac.

*—Pints

Pres Vac.—Pressure Vacuum

R. V.—Rotary Valve

C. V.—Check Valve

N. V.—Valveless

Census of Numbered Motor Boats †

Port	Symbol Letter	1931	1932	1933	1934
Baltimore, Md.	N-P	15,588	15,888	16,925	17,223
Boston, Mass.	C-D-E	13,346	13,402	13,654	14,032
Bridgeport, Conn.	H-J	6,401	6,486	7,244	7,584
Buffalo, N. Y.	Z	1,148	1,186	2,093	2,400
Charleston, S. C.	U Preceding	1,233	1,272	1,526	1,703
Chicago, Ill.	S-T	6,995	7,183	8,114	8,421
Cleveland, Ohio	N	5,412	5,522	6,706	7,428
Des Moines, Iowa	H	3,051	3,127	3,295	3,392
Detroit, Mich.	P-R-A	10,779	11,834	12,947	13,901
Duluth, Minn.	U	1,055	1,055	833	973
Galveston, Tex.	E	2,611	2,691	3,375	4,108
Great Falls, Mont.	G	17	19	22	22
Honolulu, Hawaii	X-Y	894	938	1,220	1,344
Indianapolis, Ind.	K	1,557	1,652	1,745	1,820
Juneau, Alaska	T-U	3,826	3,947	4,007	4,050
Los Angeles, Calif.	A	3,674	3,878	3,980	4,198
Louisville, Ky.	L	2,290	2,275	2,290	2,295
Memphis, Tenn.	M	4,240	3,539	3,830	4,011
Milwaukee, Wis.	W	2,232	2,272	2,476	2,823
Minneapolis, Minn.	Z	748	759	755	811
Mobile, Ala.	A	3,690	3,853	4,168	4,400
New Orleans, La.	B-C	14,020	14,769	15,657	16,368
New York, N. Y.	K*	35,403	35,379	40,289	42,225
Norfolk, Va.	R-S	14,318	14,896	15,513	15,957
Ogdensburg, N. Y.	Y	3,596	3,252	4,705	5,020
Omaha, Neb.	Y	362	368	634	708
Pembina, N. D.	J	22	28	40	44
Philadelphia, Pa.	L-M	15,685	15,820	16,808	17,301
Pittsburgh, Pa.	V	586	754	907	1,052
Port Arthur, Tex.	D	1,511	1,610	1,783	1,956
Portland, Me.	A-B	13,374	13,664	14,237	15,262
Portland, Ore.	G-H-J	7,622	7,907	8,368	8,701
Providence, R. I.	F-G	3,040	3,038	3,124	2,824
Rochester, N. Y.	Q	3,558	3,695	4,454	5,087
St. Albans, Vt.	X	615	486	859	1,028
St. Louis, Mo.	X	7,171	7,400	8,457	9,024
San Antonio, Tex.	F	819	928	1,063	1,262
San Diego, Calif.	V	304	370	450	543
San Francisco, Calif.	B-C-D-E-F	5,729	5,626	6,049	6,703
San Juan, Puerto Rico	F-G	226	238	238	264
Savannah, Ga.	U After	1,396	1,399	1,401	1,430
Seattle, Wash.	K-L-M	7,913	8,219	10,481	10,826
Tampa, Fla.	V-W	22,290	23,240	25,229	25,698
Wilmington, N. C.	T	8,184	7,735	9,067	9,402
Total		258,531	263,599	291,008	305,624

*Motor boats without designating symbol letters are numbered in the District of New York.

†Bureau of Navigation, Department of Commerce.

BRITISH PASSENGER CARS

CAR MAKE AND MODEL	Number of Cylinders Bore and Stroke (Ins.)	ENGINE					FUEL SYSTEM					GEARSET		REAR AXLE		Brks.		Chassis Weight (Lbs.)													
		Maximum Bore H.P. at Specified R.P.M.	Piston Displacement (Cu. Ins.)	Compression Ratio	Cylinder Arrangement	No. of Main Bearings	Valve Location	Cylinder and Crankcase Castings	Piston Material	Camshaft Drive	Wheelbase (Ins.)	Tread—Rear—(Ins.)	Tires—(Ins. or metric)	Cooling System	Oil Pressure to	Carburetor Make	Carburetor Type	Fuel Feed	Ignition Current Source	Clutch Type	Location	No. of Forward Speeds	Synchronizing Clutches	Final Drive	Gear Ratio—1	Torque taken by	Independent Wheel Suspension	Serv. Brks Application	Servo Unit Fitted		
A. C. Standard	6-2.56x3.94	56-3500	121.5	5.75	I	5	Sep. Al.	Ch.	115	50	5.00/19	Pu. abce	Str.	Up.	Pu. B.	SP.	En.	4	N	SB.	4.06	sp.	M	N	N	1820					
A. C. Sports	6-2.56x3.94	56-3500	121.5	6.00	I	5	Sep. Al.	Ch.	115	50	5.00/19	Pu. abce	Str.	Up.	Pu. B.	SP.	En.	4	N	SB.	4.50	sp.	M	N	N	1820					
Alvis. S.C. 19.82	6-2.88x4.34	98-4250	168.3	6.45	I	4	Sep. Al.	Ch.	124	56	5.50/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.55	sp.	M	N	N	2580					
Alvis. S.A. 13.22	6-2.88x4.33	61-4200	112.0	5.89	I	4	Sep. Al.	Ch.	118	52	5.00/20	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	2247					
Alvis. T.D. 19.82	6-2.88x4.34	72-4200	153.0	5.55	I	4	Sep. Al.	Ch.	123	56	5.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	2121					
Alvis. T.E. 19.82	6-2.88x4.34	72-4200	153.0	5.55	I	4	Sep. Al.	Ch.	123	56	5.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	2632					
Armstrong Siddeley Special	6-3.51x5.25	302.0	5.30	I	4	Sep. Al.	Ch.	132	58	6.50/19	Pu. abce	CH.	Do.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	2660						
Armstrong Siddeley 20 HP	6-2.88x5.00	194.5	5.30	I	4	Sep. Al.	Ch.	111	52	5.25/19	Pu. abce	CH.	Do.	Pu. B.	SP.	En.	4	N	SB.	4.36	tt.	M	N	N	2632						
Armstrong Siddeley 17 HP	6-2.63x4.50	146.5	5.30	I	4	Sep. Al.	Ch.	111	52	5.25/19	Pu. abce	CH.	Do.	Pu. B.	SP.	En.	4	N	SB.	5.30	tt.	M	N	N	2632						
Armstrong Siddeley 12 HP	6-2.23x3.76	87.5	5.50	I	4	Sep. Al.	Ch.	111	52	5.25/19	Pu. abce	CH.	Do.	Pu. B.	SP.	En.	4	N	SB.	5.30	tt.	M	N	N	2632						
Aston Martin Mark II	4-2.73x3.90	70-4750	91.0	7.80	I	3	Sep. Al.	Ch.	103	52	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2128					
Aston Martin Ulster	4-2.73x3.90	80-5250	91.0	8.50	I	3	Sep. Al.	Ch.	103	52	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2016					
Aston Martin Mark II	4-2.73x3.90	70-4750	91.0	7.80	I	3	Sep. Al.	Ch.	103	52	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2016					
Austin 12 HP	4-2.84x4.53	89-3600	228.5	5.50	I	3	Sep. Al.	Ch.	106	50	4.50/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1694					
Austin 10 HP	4-2.50x3.50	20-2600	68.6	5.50	I	3	Sep. Al.	Ch.	81	45	4.00/17	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1400					
Austin 12.4	4-2.73x3.90	26-2600	93.5	5.50	I	3	Sep. Al.	Ch.	106	50	4.75/19	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1414					
Austin 13.9	6-2.41x3.33	26-2600	91.1	5.80	I	4	Sep. Al.	Ch.	106	50	4.75/19	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1414					
Austin 15	6-2.38x3.33	30-2600	104.3	5.70	I	4	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1764					
Austin 12 HP	4-2.81x4.50	32-2600	113.5	4.95	I	5	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.25	sp.	M	N	N	1862					
Austin 16 HP	6-2.58x4.37	43-2600	153.0	5.35	I	8	Sep. Al.	Ch.	136	57	6.00/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2576					
Austin 18 HP	6-2.73x4.37	43-2600	153.0	5.35	I	8	Sep. Al.	Ch.	136	57	6.00/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2576					
Austin 20 HP	6-3.12x4.50	58-2600	207.0	5.45	I	8	Sep. Al.	Ch.	136	57	6.00/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.67	sp.	M	N	N	2576					
Bentley 3 1/2 Litre	6-3.25x4.50	45-4500	224.0	6.50	I	7	Sep. Al.	Ch.	126	56	5.50/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.75	sp.	M	N	N	2510					
Crossley Sport S	6-2.48x3.54	34-4200	98.3	6.00	I	4	Sep. Al.	Ch.	108	48	5.50/16	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1484					
Crossley Regia	6-2.48x3.54	34-4200	98.3	6.00	I	4	Sep. Al.	Ch.	108	48	5.50/16	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1484					
Crossley 2 Litre	6-2.56x3.94	60-4000	121.5	6.00	I	4	Sep. Al.	Ch.	108	48	5.50/16	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1484					
Crossley 3 Litre	6-2.96x4.50	70-4000	195.0	5.40	I	4	Sep. Al.	Ch.	109	50	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	2464					
Daimler 15	6-2.50x4.14	45-3600	122.0	6.00	I	4	Sep. Al.	Ch.	109	50	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	2576					
Daimler 20	6-2.84x4.34	59-3200	164.0	5.50	I	7	Sep. Al.	Ch.	124	56	6.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1792					
Daimler 25	6-2.84x4.34	59-3200	164.0	5.50	I	7	Sep. Al.	Ch.	124	56	6.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1792					
Frazer Nash D.O. H.C.	6-2.36x3.86	76-5000	101.2	8.00	I	3	Sep. Al.	Ch.	108	48	5.50/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	2912					
Frazer Nash O.H.C.	4-2.72x3.94	60-4000	91.1	8.00	I	3	Sep. Al.	Ch.	108	48	5.50/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.33	sp.	M	N	N	1470					
Ford V8	8-3.06x3.75	90-3700	221.0	6.32	V	3	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.11	tt.	M	N	N	1360					
Ford 8 & 10 Tax	4-2.23x3.64	22-3500	56.9	6.20	I	3	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.11	sp.	M	N	N	2000					
Ford 10 Tax	4-2.50x3.64	71.6	6.60	I	3	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.11	sp.	M	N	N	1085						
Hillman 20/70	6-2.96x4.18	70-3800	171.5	5.80	I	4	Sep. Al.	Ch.	111	57	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.00	sp.	M	N	N	2280					
Hillman Minx	4-2.48x3.74	28-4200	72.2	5.70	I	3	Sep. Al.	Ch.	92	47	4.50/16	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	1350					
Hillman 7 Seater	4-2.96x4.18	70-3800	171.5	5.80	I	4	Sep. Al.	Ch.	111	57	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	2340					
Humber Twelve	6-2.74x4.33	44-3800	101.8	5.70	I	3	Sep. Al.	Ch.	99	51	5.00/17	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.22	sp.	M	N	N	1850					
Humber 16/60	6-2.56x4.18	55-3800	128.8	6.00	I	7	Sep. Al.	Ch.	124	57	6.00/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.75	sp.	M	N	N	2400					
Humber Snipe 8/70	6-2.56x4.18	55-3800	128.8	6.00	I	7	Sep. Al.	Ch.	124	57	6.00/18	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.75	sp.	M	N	N	2400					
Jowett 18	6-2.97x4.00	17-3500	55.4	4.65	I	4	Sep. Al.	Ch.	102	48	5.00/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.37	sp.	M	N	N	1232					
Lanchester Light 6	6-2.74x4.14	53-3600	207.0	6.00	I	4	Sep. Al.	Ch.	102	48	5.00/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.37	sp.	M	N	N	2352					
Lanchester 10	6-2.24x3.55	34-3600	84.0	6.50	I	4	Sep. Al.	Ch.	102	48	5.00/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.37	sp.	M	N	N	1568					
Lea & Francis 2 Litre	4-2.50x3.75	30-3600	73.4	6.00	I	3	Sep. Al.	Ch.	102	48	5.00/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.37	sp.	M	N	N	1568					
Lea & Francis 16/70	6-2.72x3.94	64-3800	137.0	6.00	I	4	Sep. Al.	Ch.	114	50	5.25/18	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.70	sp.	M	N	N	1792					
Lea & Francis S	6-2.56x4.34	54-4000	121.5	5.72	I	4	Sep. Al.	Ch.	114	50	5.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.70	sp.	M	N	N	1848					
Lea & Francis 12/40	4-2.72x3.94	45-4000	91.1	4.70	I	3	Sep. Al.	Ch.	111	50	4.75/19	Th. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	3.91	sp.	M	N	N	1708					
Marechal 17/18	6-2.06x4.49	147.0	6.50	I	4	Sep. Al.	Ch.	117	57	5.00/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	4.00	tt.	M	N	N	1628						
M. G. N	6-2.25x3.31	22-3500	56.9	6.20	I	3	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4	N	SB.	5.11	sp.	M	N	N	2000					
M. G. KN	6-2.25x3.31	22-3500	56.9	6.20	I	3	Sep. Al.	Ch.	112	56	5.25/19	Pu. abce	SU.	Ho.	Pu. B.	SP.	En.	4													

CONTINENTAL PASSENGER CARS

CAR MAKE AND MODEL	ENGINE										FUEL SYSTEM					GEARSET		REAR AXLE		Brakes													
	No. of Cylinders Bore and Stroke (Ins.)	Maximum Brake H.P. at Specified R.P.M.	Piston Displacement (Cu. Ins.)	Compression Ratio — to 1	Cylinder Arrangement	No. of Main Bearings	Valve Location	Cylinder and Crank- case Castings	Piston Material	Camshaft Drive	Wheelbase (Ins.)	Tread—Rear (Ins.)	Tires (Ins. or Metres)	Cooling System	Oil Pressure to—	Carburetor Make	Carburetor Type	Fuel Feed	Ignition Current Source	Clutch Type	Location	No. of Forward Speeds	Synchronizing Clutches	Final Drive	Gear Ratio—to 1	Torque taken by	Independent Wheel Suspension	Serv. Brake Application	Servo Unit Fitted	Chassis Weight			
AUSTRIAN																																	
Steyr.....430	6-2.76x3.55	45-3600	123.0	5.75	I.	8	I.	Sep.	Als.	He.	117.5	54.4	4.5/25/18	Pu.	ac.	Pal.	Up.	Gr.	B.	Sp.	En.	4	Y	SB.	4.7	ta.	R.	...	Y	...			
Steyr.....100	4-2.78x3.55	32-3600	84.5	5.75	I.	5	I.	Int.	Als.	He.	102.5	48.9	4.75/18	Th.	ac.	Pal.	Up.	Gr.	B.	Sp.	En.	4	Y	SB.	4.55	ta.	FR.	...	Y	...			
BELGIAN																																	
F.N.....42E	4-3.35x3.94	48-3500	138.4	6.50	I.	3	L.	Int.	Al.	He.	59.1	50.1	150/400	Pu.	abc.	So.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	4.88	sp.	No.	M.	N.	1825			
F.N.....42	4-3.14x3.94	40-3500	121.6	6.00	I.	3	L.	Int.	Al.	He.	50.5	50.5	150/400	Th.	abc.	So.	Up.	Pu.	B.	Sp.	En.	3	N	SB.	4.88	sp.	No.	M.	N.	1630			
F.N.....F.N. 8	8-2.84x3.94	75-3500	248.0	5.50	I.	5	L.	Int.	Al.	He.	58.3	6.00	32	Pu.	abc.	So.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	5.30	sp.	No.	M.	N.	2510			
Imperia.....T.A. 4	4-2.92x3.74	40-3400	100.5	5.54	I.	3	L.	Sep.	Al.	Ch.	111.2	49.2	4.75/17	Th.	abc.	So.	Up.	Gr.	B.	Sp.	En.	4	Y	...	4.83	ta.	FR.	M.	N.	2200			
Imperia.....T.A. 6	4-2.56x2.96	25-4000	61.0	6.00	I.	3	L.	Sep.	Al.	Ch.	102.5	47.3	4.50/17	Th.	abc.	So.	Up.	Gr.	B.	Sp.	En.	4	Y	...	5.43	ta.	FR.	M.	N.	1650			
Minerva.....36	6-2.96x4.41	65-3200	181.0	5.54	I.	7	S.	Sep.	Als.	Ch.	123.0	58.9	152/820	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	5.10	sp.	No.	M.	N.	2820			
Minerva.....25CV	8-2.96x4.41	95-4000	241.0	5.70	I.	7	S.	Sep.	Als.	Ch.	144.0	59.1	160/862	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	4.80	sp.	No.	M.	N.	3090			
Minerva.....M4	4-2.96x4.41	50-4000	120.5	5.54	I.	3	S.	Sep.	Al.	Ch.	106.5	54.5	160/722	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	3	Y	SB.	4.81	sp.	No.	M.	N.	2190			
CZECHO-SLOVAKIAN																																	
Praga.....Z	4-2.36x3.47	22-3200	60.8	5.80	I.	2	L.	Sep.	Als.	He.	100.0	43.4	4.75/16	Pu.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	3	Y	SB.	5.56	sp.	FR.	M.	N.	1230			
Praga.....T203	4-2.36x3.47	22-3200	60.8	5.80	I.	2	L.	Sep.	Als.	He.	98.5	47.2	5.25/16	Th.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	3	Y	SB.	5.78	sp.	No.	M.	N.	1375			
Praga.....PT	4-2.96x3.55	35-3200	101.2	6.10	I.	3	L.	Sep.	Als.	He.	106.5	50.0	5.75/16	Pu.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	3	Y	SB.	5.12	sp.	No.	M.	N.	1585			
Praga.....A21	6-2.56x3.55	38-3200	109.2	5.40	I.	4	L.	Sep.	Als.	He.	118.0	50.6	6.50/18	Th.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	4	N	SB.	5.63	tt.	R.	M.	N.	2020			
Praga.....G18	8-3.15x3.33	85-3200	268.8	5.16	I.	5	L.	Sep.	Als.	He.	142.0	56.0	6.50/20	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	N	Hyp	4.82	tt.	R.	M.	N.	3440			
Praga.....LN	4-2.76x3.70	28-3000	88.4	5.43	I.	3	L.	Sep.	Als.	He.	118.0	52.0	6.50/18	Pu.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	3	N	SB.	7.13	sp.	R.	M.	N.	2018			
Praga.....AN	4-2.96x4.34	32-3000	118.8	5.10	I.	2	L.	Sep.	Als.	He.	134.0	54.2	6.00/20	Pu.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	4	N	SB.	7.88	tt.	R.	M.	N.	2900			
Praga.....RN	6-3.15x4.53	55-2800	211.8	5.34	I.	4	L.	Sep.	Als.	He.	144.0	55.1	6.50/20	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	N	SB.	5.45	tt.	R.	M.	N.	3390			
Skoda.....Popular	4-2.56x2.96	22-3500	60.7	6.00	I.	2	L.	Int.	Cl.	Ch.	90.6	41.4	120/40	Th.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	3	Y	SB.	5.42	ta.	FR.	M.	N.	880			
Skoda.....Rapid	4-2.56x3.55	26-3600	72.5	5.90	I.	3	L.	Int.	Als.	Ch.	96.5	46.1	140/40	Th.	abc.	So.	Up.	Pu.	B.	Sp.	En.	3	Y	SB.	5.57	ta.	FR.	M.	N.	1210			
Skoda.....633	6-2.56x3.55	36-3400	100.8	5.80	I.	4	L.	Int.	Als.	Ch.	109.0	51.2	150/40	Th.	abc.	So.	Up.	Gr.	B.	Sp.	En.	3	Y	SB.	5.32	sp.	No.	M.	N.	1840			
Skoda.....637	6-2.68x3.55	45-3600	119.5	5.90	I.	4	L.	Int.	Als.	Ch.	126.0	52.0	160/40	Pu.	abc.	So.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	5.55	ta.	FR.	M.	N.	2200			
Skoda.....650	6-2.96x4.01	60-3500	164.5	5.80	I.	8	L.	Int.	Als.	Ch.	133.0	53.6	6.00/18	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	5.11	sp.	FR.	M.	N.	2420			
Tatra.....77	8-2.96x3.31	60-3200	181.0	5.80	V.	3	I.	Sep.	Al.	Ch.	124.0	53.2	45/16	Air.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	3.75	ta.	FR.	H.	N.	1100			
Tatra.....75	4-3.15x3.31	30-3400	102.5	5.20	*	2	I.	Sep.	Als.	He.	106.2	51.2	150/40	Air.	abc.	Ze.	Up.	Gr.	B.	Sp.	En.	4	Y	SB.	4.75	tt.	FR.	H.	N.	1145			
Tatra.....57	4-2.76x2.96	20-3000	68.0	5.00	*	2	I.	Sep.	Als.	He.	100.1	47.3	140/40	Air.	abc.	Am.	Up.	Gr.	B.	Sp.	En.	4	Y	SB.	5.20	tt.	FR.	M.	N.	1034			
Walter.....Jr.	4-2.56x2.95	22-3600	60.7	5.80	I.	3	L.	Int.	Als.	Ch.	88.0	47.0	4.50/17	Th.	abc.	So.	Up.	Gr.	B.	Sp.	En.	3	N	SB.	5.12	sp.	No.	H.	N.	860			
Walter.....Bijou	4-2.64x4.01	32-3200	87.8	5.85	I.	3	L.	Int.	Als.	Ch.	100.0	48.0	4.75/27	Pu.	abc.	So.	Up.	Gr.	B.	Sp.	En.	4	Y	SB.	5.60	sp.	No.	M.	N.	1330			
Walter.....Princ	6-2.83x4.01	55-3300	152.0	5.90	I.	7	L.	Int.	Als.	Ch.	109.0	57.0	6.25/18	Pu.	abc.	So.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	4.70	sp.	No.	H.	N.	1740			
Walter.....Lord	6-2.83x4.01	55-3300	152.0	5.90	I.	7	L.	Int.	Als.	Ch.	127.0	57.4	6.00/18	Pu.	abc.	So.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	5.30	sp.	No.	H.	N.	1950			
Walter.....Super 6	6-3.15x4.25	70-3000	198.8	5.50	I.	4	I.	Sep.	Als.	Ch.	130.0	55.0	6.50/20	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	N	SB.	4.72	tt.	No.	H.	N.	2425			
Walter.....Regent	6-3.15x4.25	80-3400	198.8	5.50	I.	4	I.	Sep.	Als.	He.	130.0	55.0	6.50/20	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	N	SB.	4.72	tt.	No.	H.	N.	2425			
Zbrojovka.....Z-4	2-3.21x3.62	25-3000	50.8	5.00	I.	4	I.	Sep.	Al.	...	106.2	43.3	25/16	Th.	...	Am.	Up.	Gr.	B.	Sp.	En.	3	N	SB.	5.25	ta.	FR.	M.	N.	990			
Zbrojovka.....L6	2-2.84x3.54	20-3200	44.9	5.20	I.	3	I.	Sep.	Al.	...	94.5	41.4	4.75/16	Th.	...	Am.	Up.	Gr.	B.	Sp.	En.	3	N	W.	5.33	sp.	No.	M.	N.	737			
Zbrojovka.....L4-IV	2-3.21x3.70	26-3200	59.8	5.00	I.	3	I.	Int.	Al.	...	106.2	43.3	4.5/25/16	Th.	...	Am.	Up.	Gr.	B.	Sp.	En.	3	N	SB.	5.33	ta.	FR.	M.	N.	990			
FRENCH																																	
Amilcar.....	4-3.12x3.94	32-3200	122.0	5.50	I.	2	L.	Int.	Al.	He.	110.0	51.0	150/40	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	...	sp.	No.	M.	N.	1650			
Berliet.....9chK	4-2.68x3.85	32-3200	98.8	5.50	I.	2	L.	Int.	Al.	He.	112.2	52.5	154/720	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	...	sp.	No.	M.	N.	1760			
Berliet.....11chK	4-3.15x4	44-3500	122.0	5.50	I.	3	L.	Int.	Al.	He.	117.8	52.5	154/720	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	...	sp.	No.	M.	N.	2240			
Bollee.....ELB33	4-3.15x4.73	56-4000	150.0	5.00	I.	3	L.	Sep.	Al.	He.	123.0	...	6.00/18	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	Y	SB.	4.59	sp.	No.	M.	N.	2090			
Bugatti.....50	8-3.49x4.22	250-4500	299.0	5.00	I.	5	L.	Sep.	Al.	He.	122.0	55.2	6.00/32	Pu.	abc.	Sch.	Up.	Pu.	B.	Sp.	En.	3	N	MD	4.17	ta.	No.	M.	N.	1740			
Bugatti.....57	8-2.84x3.94	140-4800	210.0	6.00	I.	6	L.	Sep.	Al.	He.	130.0	53.2	5.50/25	Pu.	abc.	Str.	Up.	Pu.	B.	Sp.	En.	4	N	SB.	4.17	ta.	No.	M.	N.	1740			
Chenard-Walcker.....9T	4-3.13x3.33	45-3400	133.0	6.00	I.	4	L.	Int.	Al.	He.	118.0	53.5	400/150	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	W	...	4.17	ta.	FR.	M.	N.	1570			
Chenard-Walcker.....11T	4-3.13x3.33	45-3400	133.0	6.00	I.	4	L.	Int.	Al.	He.	118.0	53.5	400/150	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	W	...	4.17	ta.	FR.	M.	N.	1570			
Chenard-Walcker.....T.11-S	4-3.13x3.33	45-3400	133.0	6.00	I.	4	L.	Int.	Al.	He.	117.0	53.5	400/150	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	W	...	4.17	ta.	FR.	M.	N.	1570			
Chenard-Walcker.....U-12-A	8-3.13x3.54	80-3500	217.0	5.50	V.	3	I.	Int.	Al.	Ch.	123.0	...	45/15	Pu.	abc.	Ze.	Up.	Pu.	B.	Sp.	En.	4	SB.	...	4.30	sp.	F.	M.	N.	2165			
Chenard-Walcker.....Y.10-D	4-2.84x3.94	35-3500	99.5	5.70	I.	4	L.	Int.	Al.	He.	117.0	...</																					

CONTINENTAL PASSENGER CARS—Continued

CAR MAKE AND MODEL	ENGINE										FUEL SYSTEM				Ignition Current Source	GEARSET		REAR AXLE		Brakes		Chassis Weight					
	No. of Cylinders Bore and Stroke (In.)	Maximum Brake H.P. at Specified R.P.M.	Piston Displacement (Cu. In.)	Compression Ratio — to 1	Cylinder Arrangement	No. of Main Bearings	Valve Location	Cylinder and Crankcase Castings	Piston Material	Camshaft Drive	Wheelbase (In.)	Tread—Rear (In.)	Tires (In. or Metres)	Cooling System		Oil Pressure to—	Carburetor Make	Carburetor Type	Fuel Feed	Location	No. of Forward Speeds Synchronizing Clutches		Final Drive	Gear Ratio — to 1	Torque taken by Independent Wheel Suspension	Serv. Brake Application	Servo Unit Fitted
FRENCH—(Continued)																											
Rosengart	LR145	4-2.93x3.74	45-4000	100.1	5.60	1	3	L. Int. Als. Ch.	107.249.3	315/142	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	Y SB.	4.70 sp.	F. M. N.	1445								
Rosengart	LR505	4-2.39x3.74	45-4000	100.1	5.60	1	3	L. Int. Als. Ch.	114.049.3	322/134	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.83 sp.	F. M. N.	1515								
Salomon	S4D	4-2.84x3.86	45-3800	100.2	5.70	1	3	L. Int. Als. Ch.	112.052.8	650/150	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.90 sp.	F. M. N.	1430								
Talbot	T110	6-2.95x3.72	64-3800	153.0	5.60	1	4	L. Int. Als. Ch.	118.558.0	160/40	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	4.45 sp.	F. M. N.	3350								
Talbot	Baby Sport	6-3.70x4.12	90-3800	183.0	6.30	1	4	L. Int. Als. Ch.	116.058.0	5.25/18	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	4.27 sp.	F. M. N.	3270								
Talbot	T120S	6-3.70x4.12	90-3800	183.0	5.80	1	4	L. Int. Als. Ch.	118.358.0	160/40	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	4.45 sp.	F. M. N.	1915								
Talbot	T150	6-3.70x4.12	110-4200	183.0	6.80	1	4	L. Int. Als. Ch.	116.058.0	5.25/18	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	3.90 sp.	F. M. N.	1826								
Talbot	T120L	6-3.70x4.12	90-3800	183.0	5.80	1	4	L. Int. Als. Ch.	130.056.8	6.50/17	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	4.90 sp.	F. M. N.	1980								
Talbot	T8	8-2.93x3.78	88-3700	206.0	5.60	1	5	L. Int. Als. Ch.	138.556.8	6.50/17	Pu. ac.	So. Do.	Pu. B.	Sp. Se.	14	N SB.	4.45 sp.	F. M. N.	2200								
Unic.	U6	4-2.95x4.45	70-3300	183.0	5.50	1	5	L. Sep. Als. Ch.	131.056.0	180/40	Pu. abce.	Ze. Hr.	Pu. M.	Dp. En.	4	Y SB.	4.65 sp.	F. M. N.	2225								
Unic.	U4	4-2.86x4.72	50-3600	122.0	5.45	1	3	L. Sep. Als. Ch.	127.056.0	160/40	Pu. abce.	Ze. Hr.	Pu. M.	Dp. En.	4	Y SB.	4.65 sp.	F. M. N.	2100								
Vainin	C25	6-3.00x4.34	183.0	6.00	1	3	S. Sep. Als. Ch.	125.553.1	6.50/18	Pu. abce.	Ze. Hr.	Pu. B.	MD En.	4	N SB.	4.36 sp.	No. M. Y.	2420									
GERMAN																											
Adler	19	4-2.56x2.96	25-4000	60.7	5.60	1	3	L. Int. Als. Ch.	103.547.3	4.50/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	5.43 sp.	FR. M. Y.	1230								
Adler	17A	4-2.92x3.74	38-3800	100.2	5.50	1	3	L. Int. Als. Ch.	106.049.2	5.00/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.78 sp.	No. H. N.	1570								
Adler	17AV	4-2.92x3.74	38-3800	100.2	5.50	1	3	L. Int. Als. Ch.	114.049.2	24.75/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.83 sp.	FR. M. Y.	1605								
Adler	29	4-3.15x3.74	45-3800	116.5	6.00	1	3	L. Int. Als. Ch.	117.053.2	5.50/16	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.43 sp.	FR. M. Y.	1760								
Adler	39	6-2.96x4.34	65-3800	178.0	5.50	1	4	L. Int. Als. Ch.	126.056.0	5.50/18	Pu. abce.	So. Do.	Pu. B.	Sp. En.	4	Y SB.	4.63 sp.	F. M. N.	2210								
Adler	Sid. 8	6-2.96x4.34	81-3300	237.0	5.30	1	9	L. Sep. Als. Ch.	131.056.7	6.00/20	Pu. abce.	Str. Up.	Pu. B.	Sp. En.	4	Y SB.	3.93 sp.	No. H. N.	2860								
Audi	UW	6-2.76x3.35	40-3500	119.8	5.60	1	7	I. Sep. Als. Ch.	117.553.2	720/142	Pu. abce.	So. Up.	Gr. B.	Sp. En.	4	N Wo.	5.25 sp.	FR. M. N.	2050								
B.M.W.	309	4-2.28x3.15	22-4000	51.5	5.60	1	2	I. Int. Als. Ch.	94.547.0	5.25/16	Pu. abce	So. Up.	Gr. B.	Sp. En.	4	Y SB.	5.85 sp.	F. M. N.	1100								
B.M.W.	315	6-2.28x3.70	34-3900	91.0	5.60	1	4	I. Int. Als. Ch.	94.547.1	15.25/16	Pu. abce	So. Up.	Gr. B.	Sp. En.	4	Y SB.	5.15 sp.	F. M. N.	1230								
D.K.W.	CA-700	2-3.00x3.00	20-3500	41.0	6.00	1	6	Sep. Als. Ch.	103.048.0	700/127	Th. abce.	So. Up.	Gr. B.	MD En.	3	N SB.	3.05 sp.	FR. M. N.	1155								
D.K.W.	C-600	2-2.92x2.68	18-3500	35.4	6.00	1	6	Sep. Als. Ch.	103.048.0	695/102	Th. abce.	So. Up.	Gr. B.	MD En.	3	N SB.	3.26 sp.	FR. M. N.	1010								
D.K.W.	KB-1000	4-2.68x2.70	26-3500	61.0	5.80	1	22e	I. Int. Als. Ch.	112.549.3	5.00/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	4.90 sp.	No. H. N.	2200								
Hanomag	Sturm	6-2.80x3.74	50-3500	137.0	5.70	1	4	S. Sep. Als. Ch.	118.553.2	5.00/17	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	Y SB.	4.12 sp.	F. H. N.	1870								
Hanomag	Rekord	4-2.80x3.74	33-3500	91.0	5.60	1	3	S. Sep. Als. Ch.	111.049.2	24.75/17	Pu. abce.	So. Up.	Gr. B.	Sp. En.	4	Y SB.	4.50 sp.	F. H. N.	1650								
Hanomag	Kurier	4-2.48x3.47	23-3500	66.4	5.40	1	3	I. Sep. Als. Ch.	107.449.2	24.50/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	5.90 sp.	F. H. N.	1540								
Hanomag	Garant	4-2.48x3.47	23-3500	66.4	5.40	1	2	I. Sep. Als. Ch.	96.547.2	24.50/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	N SB.	5.90 sp.	No. H. N.	1210								
Hansa-Lloyd	1100	4-2.56x3.23	28-3000	65.3	5.80	1	3	I. Int. Als. Ch.	106.252.0	4.50/17	Pu. abce.	So. Hr.	Gr. B.	Sp. En.	4	N SB.	5.28 sp.	FR. H. N.	1145								
Hansa-Lloyd	1700	6-2.56x3.23	40-3600	95.5	5.80	1	4	I. Int. Als. Ch.	113.052.0	4.75/17	Pu. abce.	So. Hr.	Gr. B.	Sp. En.	4	N SB.	4.62 sp.	FR. H. N.	1230								
Horch	500B	8-3.43x4.10	100-3000	300.0	5.40	1	10	S. Int. Als. Ch.	148.059.0	805/182	Pu. abce.	So. Do.	Pu. B.	Sp. En.	4	Y SB.	5.35 sp.	No. H. Y.	3850								
Horch	780B	8-3.43x4.10	100-3000	300.0	5.40	1	10	S. Int. Als. Ch.	136.059.0	805/182	Pu. abce.	So. Do.	Pu. B.	Sp. En.	4	Y SB.	4.90 sp.	No. H. Y.	3520								
Horch	830	8-2.96x3.35	70-3400	182.0	5.60	1	3	L. Int. Als. Ch.	126.058.0	780/160	Pu. abce.	So. Do.	Pu. B.	Sp. En.	4	Y SB.	5.45 sp.	No. H. Y.	2640								
Maybach	DS5	12-3.62x3.94	200-3200	484.0	6.30	1	8	I. Int. Als. Ch.	147.059.9	97.00/20	Pu. abce.	So. Up.	Pu. B.	Dp. Se.	85	Y SB.	3.20 sp.	No. M. Y.	4400								
Maybach	DSH	6-3.94x4.34	130-3200	317.0	6.30	1	8	I. Int. Als. Ch.	147.059.9	97.00/20	Pu. abce.	So. Up.	Pu. B.	Dp. Se.	85	Y SB.	3.60 sp.	No. M. Y.	4400								
Mercedes	130	4-2.78x3.35	26-3000	79.8	6.60	1	1	L. Int. Als. Ch.	98.550.0	4.75/17	Pu. abce.	So. Up.	Gr. B.	Sp. En.	4	N Wo.	6.75 sp.	FR. H. N.	1190								
Mercedes	170	6-2.56x3.35	32-3200	100.3	5.75	1	1	L. Int. Als. Ch.	102.552.7	5.25/17	Pu. abce.	So. Up.	Gr. B.	Sp. En.	4	Y SB.	6.10 sp.	FR. H. N.	1580								
Mercedes	200	6-2.76x3.35	40-3200	119.9	5.75	1	1	L. Int. Als. Ch.	106.554.5	5.50/17	Pu. abce.	So. Up.	Gr. B.	Sp. En.	4	Y SB.	6.10 sp.	FR. H. N.	1925								
Mercedes	290	6-3.07x3.94	60-3200	175.0	5.75	1	1	L. Int. Als. Ch.	113.558.3	6.50/17	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	Y SB.	5.77 sp.	FR. H. N.	2530								
Mercedes	500	8-3.25x4.54	100-3100	300.0	5.75	1	1	L. Int. Als. Ch.	144.558.5	6.50/20	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	Y SB.	5.77 sp.	No. H. Y.	3740								
Mercedes	Grand	8-3.74x5.32	150-2800	467.0	5.50	1	1	I. Int. Als. Ch.	148.059.1	7.00/20	Pu. abce.	Own Up.	Pu. B.	Dp. En.	6	N SB.	4.50 sp.	No. M. Y.	4300								
Mercedes	500M	8-3.39x4.25	100-3400	330.0	5.50	1	1	I. Int. Als. Ch.	129.559.0	6.50/17	Pu. abce.	Own Up.	Pu. B.	Sp. En.	4	Y SB.	4.88 sp.	FR. H. Y.	2640								
Opel	2.0 Ltr.	6-2.66x3.54	37-3200	117.9	5.75	1	3	L. Int. Als. Ch.	120.049.6	5.50/16	Pu. abce.	Own Do.	Pu. B.	Sp. En.	4	N SB.	4.30 sp.	F. H. N.	.....							
Opel	1.3 Ltr.	4-2.66x3.54	24-3200	78.6	6.00	1	1	L. Int. Als. Ch.	97.446.0	5.25/16	Pu. abce.	Own Do.	Pu. B.	Sp. En.	4	N SB.	4.78 sp.	F. H. N.	.....							
Opel	1.2 Ltr.	4-2.56x3.54	23-3200	72.8	6.00	1	1	L. Int. Als. Ch.	90.046.0	4.50/17	Pu. abce.	Own Do.	Pu. B.	Sp. En.	4	N SB.	5.14 sp.	No. M. N.	1235								
Rehr	Jr.	4-2.96x3.31	36-3700	91.2	5.45	1	2	I. Sep. Als. Ch.	101.049.2	4.75/17	Air. ab.	Pal. Up.	Gr. B.	Sp. En.	4	N SB.	4.72 sp.	FR. H. N.	1145								
Rehr	F	8-2.74x4.25	75-3500	205.0	6.00	1	9	I. Sep. Als. Ch.	127.555.2	6.50/17	Pu. ab.	Ze. Up.	Gr. B.	Sp. En.	4	Y Wo.	5.20 sp.	FR. H. N.	2310								
Stoewer	V8	8-2.74x4.23	55	152.0	6.00	1	3	Hr. Int. Als. Ch.	118.054.0	5.25/17	Pu. ab.	So. Do.	Pu. B.	Sp. En.	4	Y SB.	4.87 sp.	FR. H. N.	1935								
Stoewer	RISV	4-2.84x3.55	32	89.5	6.50	1	3	L. Int. Als. Ch.	118.550.5	4.75/17	Th. abce.	So. Up.	Gr. B.	Sp. En.	4	Y SB.	4.87 sp.	FR. H. N.	1640								
Wanderer	W240	6-2.76x3.35	40-3500	119.8	6.40	1	7	I. Int. Als. Ch.	110.053.2	5.25/17	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	N SB.	3.50 sp.	R. H. N.	1980								
Wanderer	W235	6-2.56x3.35	35-3500	103.0	6.40	1	7	I. Int. Als. Ch.	118.053.2	5.25/17	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	N SB.	5.75 sp.	R. H. N.	1980								
Wanderer	W250	6-2.56x3.74	50-3500	133.8	6.00	1	7	I. Int. Als. Ch.	118.053.2	5.25/17	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	N SB.	4.80 sp.	R. H. N.	1980								
ITALIAN																											
Alfa Romeo	6C	6-2.76x3.94	68-4400	141.0	6.50	1	7	I. Int. Als. Ch.	126.656.4	6.00/18	Pu. abce.	So. Up.	Pu. B.	Sp. En.	4	Y SB.	5.10 sp.	No. M. N.	2024								
Alfa Romeo	8CGS	8-2.96x3.47	130-4900	142.4	5.75	1	10	I. Int. Als. Ch.	108.454.4	5.50/19	Pu. abce.	Me. Up.	Pu. B.	MD En.	4	N SB.	4.25 sp.	No. M. N.	1980								
Ansaldo	42	8-2.96x3.47	70-3500	215.5	5.50	1	10	I. Int. Als. Ch.	130.555.0	6.50/18	Pu. abce.	Ze. Do.	Pu. B.	Sp. En.	4	Y SB.	5.40 sp.	No. M. N.	2090								
Bianchi	S8	4-2.68x3.94	80-4000	177.5	6.04	1	5	I. Int. Als. Ch.	128.055.5	4.50/18	Pu. abce.	Str. Do.	Pu. B.	Sp. En.	4	Y SB.	5.10 sp.	No. M. N.	2420								
Bianchi	S9	4-2.68x3.94	42-4000	88.5	6.00	1	3	I. Int. Als. Ch.	110.055.0	6.00/16	Th.																

American Passenger Car Engine Trends

(Based on Number of Models Offered)

Displacement per Cylinder

	Cu. in.
1927	39.5
1928	39.1
1929	38.9
1930	37.6
1931	36.8
1932	36.7
1933	36.0
1934	36.2
1935	36.1

Average R.P.M.'s

1927	2740
1928	2860
1929	3063
1930	3170
1931	3230
1932	3250
1933	3360
1934	3420
1935	3480

Average Compression Ratio

1924	4.36
1925	4.40
1926	4.47
1927	4.55
1928	4.86
1929	4.99
1930	5.15
1931	5.23
1932	5.29
1933	5.57
1934	5.72
1935	5.98

Number of Cylinders

	Per Cent 4 Cyl.	Per Cent 6 Cyl.	Per Cent 8 Cyl.	Per Cent 12 Cyl.	Per Cent 16 Cyl.
1922	30.8	59.1	9.5	0.6	...
1923	22.1	66.9	10.4	0.6	...
1924	19.5	70.3	10.2	...	...
1925	14.8	67.8	17.4	...	...
1926	13.00	66.0	21.0	...	...
1927	6.00	65.0	29.0	...	...
1928	6.50	58.0	35.5	...	...
1929	4.00	55.00	41.00	...	...
1930	2.92	43.20	52.70	...	0.98
1931	3.85	30.80	61.50	1.28	2.57
1932	4.20	30.60	54.20	8.30	2.70
1933	5.70	30.00	51.50	10.00	2.80
1934	4.68	31.20	48.50	12.50	3.12
1935	3.50	37.90	50.00	6.90	1.70

Average Bore—Stroke Ratio

1925	1.36
1930	1.38
1931	1.39
1932	1.35
1933	1.36
1934	1.36
1935	1.36

H.P. per cu. in. of Displacement

1925	.233
1926	.236
1927	.256
1928	.276
1929	.306
1930	.331
1931	.344
1932	.353
1933	.376
1934	.388
1935	.398

Average B.M.E.P.

At Maximum H.P.

	Lb. per sq. in.
1927	74.5
1928	76.2
1929	80.6
1930	82.7
1931	84.3
1932	86.2
1933	88.5
1934	90.1
1935	90.2

1922	63.0
1923	61.9
1924	61.9
1925	70.2
1926	73.5
1927	76.70
1928	76.60
1929	78.00
1930	84.33
1931	79.50
1932	74.00
1933	70.00
1934	65.7
1935	75.90

Piston Material

	Per Cent Cast Iron	P.C. Aluminum With Struts	P.C. Aluminum No Struts	Total Aluminum
1923	79.1	...	...	20.9
1924	76.0	...	...	24.0
1925	73.3	...	...	26.7
1926	76.0	...	...	24.0
1927	66.7	...	...	33.3
1928	43.4	45.8	10.8	56.6
1929	25.8	48.4	25.8	74.2
1930	21.55	61.7	16.65	78.35
1931	20.50	53.8	25.70	79.50
1932	28.00	50.0	22.00	72.00
1933	25.80	45.60	28.60	74.20
1934	17.20	43.80	39.00	82.80
1935	18.90	36.20	44.90	81.10

Valve Location

	Per Cent L-Head	Per Cent Valve-in-Head	Per Cent Hori- zontal	Per Cent Sleeve	Per Cent T-Head	Per Cent F-Head
1922	63.0	29.9	0.6	3.9	2.0	0.6
1923	61.9	29.6	...	4.6	2.6	1.3
1924	61.9	28.8	...	5.1	3.4	0.8
1925	70.2	20.5	...	5.6	2.8	0.9
1926	73.5	17.30	...	5.1	3.1	1.0
1927	76.70	14.20	...	5.1	3.0	1.0
1928	76.60	14.00	...	5.6	2.8	...
1929	78.00	14.00	...	6.00	1.00	1.00
1930	84.33	11.75	1.96	1.96	...	...
1931	79.50	17.94	1.28	1.28	...	...
1932	74.00	19.20	4.10	2.70	...	...
1933	70.00	25.71	2.86	1.43	...	...
1934	65.7	31.20	3.10	...	...	...
1935	75.90	22.40	1.70	...	...	...

Bore, Stroke, Displacement

	Bore (Inches)	Stroke (Inches)	Piston Displ. (Cu. In.)
1922	3.46	4.92	260.5
1923	3.43	4.81	257.3
1924	3.43	4.81	258.1
1925	3.48	4.73	262.6
1926	3.37	4.72	260.59
1927	3.26	4.67	254.86
1928	3.27	4.58	257.73
1929	3.27	4.57	261.27
1930	3.26	4.51	264.59
1931	3.21	4.45	273.00
1932	3.26	4.41	283.93
1933	3.23	4.40	284.07
1934	3.24	4.40	289.18
1935	3.23	4.39	271.40

Timing Drives

	Per Cent Chain	Per Cent Gear
1922	27.8	72.2
1923	35.1	64.9
1924	43.5	56.5
1925	47.0	53.0
1926	64.0	36.0
1927	75.7	24.3
1928	79.2	20.8
1929	84.8	15.2
1930	85.7	14.3
1931	83.1	16.9
1932	85.7	14.3
1933	80.0	20.0
1934	76.2	23.8
1935	74.1	25.9

Average Piston Speeds

	Feet per Min.
1927	2150
1928	2210
1929	2310
1930	2380
1931	2395
1932	2390
1933	2463
1934	2508
1935	2535

Average Number of Cylinders

1927	6.45
1928	6.59
1929	6.71
1930	7.04
1931	7.49
1932	7.78
1933	7.88
1934	7.97
1935	7.51

Average Brake Horse Power

1927	65.8
1928	70.9
1929	81.6
1930	87.6
1931	95.0
1932	101.0
1933	106.5
1934	112.5
1935	109.6

Export Markets Expand

AMERICAN PASSENGER CAR EXPORTS*

COUNTRIES	Not over \$850		Over \$850, not over \$1200		Over \$1200, not over \$2000		Over \$2000		Total 1934 Passenger Cars		Total 1933 Passenger Cars	
	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars
Europe.....	39,560	\$19,745,694	2,852	\$2,754,459	691	\$1,090,487	323	\$845,630	43,426	\$24,436,270	23,155	\$11,786,952
North America.....	8,104	4,592,643	942	912,015	235	356,586	111	323,074	9,392	6,184,318	5,355	3,184,439
South America.....	16,549	8,364,549	666	657,686	240	356,679	90	238,440	17,545	9,617,354	9,155	4,493,122
Asia.....	22,293	10,904,184	1,523	1,476,019	502	743,777	133	310,726	24,451	13,434,706	10,865	5,467,753
Oceania.....	17,076	6,493,375	557	517,960	146	225,156	33	74,903	17,812	7,311,394	3,181	1,130,980
Africa.....	29,835	15,263,353	1,215	1,165,668	204	290,323	36	80,905	31,290	16,800,249	12,043	5,741,991
TOTAL.....	133,417	\$65,363,798	7,755	\$7,483,807	2,018	\$3,063,008	726	\$1,873,678	143,916	\$77,784,291	63,754	\$31,805,237
Alaska.....									275	192,847	181	117,238
Hawaii.....	2,456	1,501,347	91	90,969	34	49,775	5	11,900	2,586	1,653,991	2,313	1,375,564
Porto Rico.....	1,495	833,517	80	79,291	26	39,550	9	21,076	1,610	973,434	1,107	647,425
GRAND TOTAL.....	137,368	\$67,698,662	7,926	\$7,654,067	2,078	\$3,152,333	740	\$1,906,654	148,387	\$80,604,563	67,355	\$33,945,464

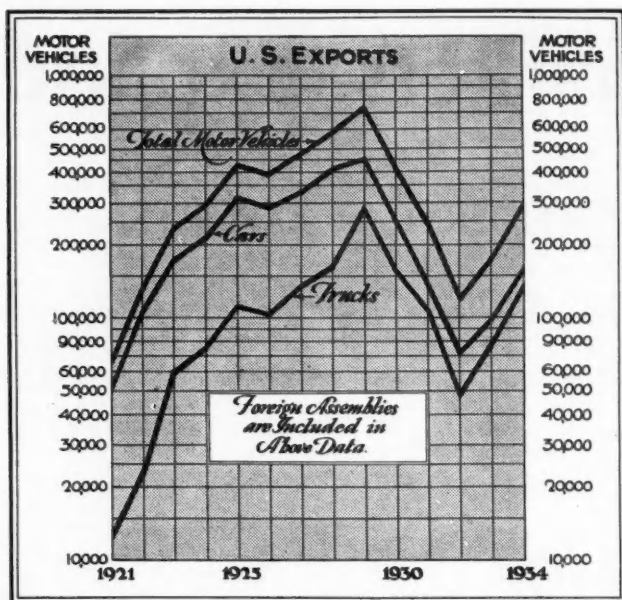
AMERICAN TRUCK EXPORTS*

COUNTRIES	Under 1 Ton		1 Ton and not over 1½ Tons		Over 1½ Tons and not over 2½ Tons		Over 2½ Tons		Bus Chassis		Total 1934 Trucks and Buses		Total 1933 Trucks and Buses	
	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars
Europe.....	2,503	\$755,158	18,862	\$7,240,366	3,587	\$2,653,864	638	\$844,830	11	\$12,728	25,601	\$11,506,946	13,733	\$5,861,306
North America.....	964	450,946	4,373	2,420,745	857	732,257	150	352,901	7	17,570	6,351	3,974,419	2,689	1,639,709
South America.....	809	301,186	13,911	6,751,892	1,187	1,155,903	246	510,896	10	27,998	16,163	8,747,875	7,080	3,641,773
Asia.....	1,524	430,574	22,710	8,643,547	2,067	1,716,453	554	1,132,644	13	18,005	26,868	11,941,223	12,908	6,121,115
Oceania.....	2,173	686,973	4,107	1,731,466	832	588,242	58	72,395	26	26,985	7,196	3,106,061	2,856	1,079,969
Africa.....	1,603	534,010	7,686	3,380,539	810	705,620	117	164,896	2	7,531	10,218	4,792,596	4,011	1,656,287
TOTAL.....	9,576	\$3,158,847	71,649	\$30,168,555	9,340	\$7,552,339	1,763	\$3,078,562	69	\$110,817	92,397	\$44,069,120	43,277	\$20,000,159
Alaska.....											196	148,691	103	83,063
Hawaii.....	211	99,433	295	184,356	32	37,316	37	140,477	1	400	576	461,982	335	323,283
Porto Rico.....	47	22,378	412	231,202	85	72,144	13	23,332	40	96,510	597	445,566	388	284,833
GRAND TOTAL.....	9,834	\$3,280,658	72,356	\$30,594,113	9,457	\$7,661,799	1,813	\$3,242,371	110	\$207,727	93,766	\$45,125,359	44,103	\$20,691,338

U. S. Exports of Parts and Accessories—1934*

COUNTRIES	Auto Parts for Assembly	Auto Pistons	Auto Piston Rings	Spark Plugs	Auto and Truck Springs	Asbestos Brake Lining		Auto Parts for Replacement N. E. S.	Auto Accessories N. E. S.	Total Exports of Parts and Accessories
						Molded and Semi-Molded	Not Molded			
Europe.....	\$6,973,125	\$188,709	\$96,395	\$1,154,947	\$49,443	\$153,479	\$38,351	\$6,793,617	\$328,656	\$16,404,157
North America.....	20,916,285	171,163	214,728	70,422	80,636	133,803	82,765	3,413,130	1,667,112	27,399,026
South America.....	3,369,642	113,196	122,756	120,336	107,471	169,881	57,087	3,665,253	177,275	8,075,524
Asia.....	4,366,816	75,467	60,630	180,462	183,876	52,751	32,150	4,457,483	169,333	9,780,168
Oceania.....	334,212	4,310	3,434	6,861	590	60,662	34,399	1,409,837	73,185	1,963,646
Africa.....	286,272	56,440	21,842	73,020	113,845	36,617	10,266	2,177,712	172,058	3,037,578
TOTAL.....	\$36,246,352	\$609,285	\$519,785	\$1,606,048	\$535,861	\$607,193	\$255,018	\$21,917,032	\$2,587,619	\$66,660,099
Alaska.....										97,054
Hawaii.....	17,708	4,065	8,221	24,124	23,283	14,117	6,076	399,674	49,062	560,183
Porto Rico.....	24,097	1,120	1,362	7,678	28,191	7,697	5,047	229,035	13,916	324,919
GRAND TOTAL.....	\$36,288,157	\$614,470	\$529,368	\$1,637,850	\$587,335	\$629,007	\$266,141	\$22,545,741	\$2,650,597	\$67,642,255

* Automotive Division—Bureau of Foreign and Domestic Commerce.



Value of U.S. Automotive Exports, 1934

Passenger Cars	\$80,604,563
Second Hand Pass. Cars	505,707
Trucks, Buses and Chassis	45,125,359
Second Hand Trucks and Buses	147,492
Trailers	195,689
Engines for Pass. Cars	1,400,651
Engines for Trucks and Buses	547,919
Engines for Marine (except Diesel)	
Detachable	320,847
Other	624,702
Parts and Accessories	67,642,255
Garage and Service Equipment	2,461,120
All Tires and Tubes	14,681,037
Tire Sundries and Repair Materials	399,488
Motorcycles	811,609
Cycle Parts and Accessories	357,008
Aeronautic Exports ...	17,548,181

Total\$233,373,627

Foreign Sales of American Motor Vehicles

	Passenger Cars			Trucks			Total Motor Vehicles
	U. S. Exports Inc. Foreign Assemblies	Canadian Output	Total Cars	U. S. Exports Inc. Foreign Assemblies	Canadian Output	Total Trucks	
1921	51,050	61,098	112,148	12,569	5,148	17,717	129,865
1922	108,426	94,904	203,330	22,473	7,149	29,622	232,952
1923	175,158	129,228	304,386	60,025	17,210	77,235	381,621
1924	217,169	117,765	334,934	75,980	17,481	93,461	428,395
1925	316,093	135,573	451,666	112,594	26,397	138,991	590,657
1926	289,135	164,856	453,991	104,309	39,871	144,180	598,171
1927	331,959	146,827	478,786	137,509	32,227	169,736	648,522
1928	418,845	196,741	615,586	163,919	45,641	209,560	825,146
1929	451,079	207,498	658,577	283,132	55,797	338,929	997,506
1930	247,764	125,442	373,206	157,951	28,750	186,701	559,907
1931	134,048	65,093	199,141	107,509	17,528	125,037	324,178
1932	72,889	50,718	123,607	47,350	10,098	57,448	181,055
1933	98,155	53,855	152,010	78,428	11,997	90,425	242,435
1934	160,436	92,538	252,974	133,266	24,352	157,618	410,592

Leading Automotive Export Markets

Country of Destination	Value	Number	Country of Destination	Value	Number
PASSENGER CARS AND CHASSIS			TRUCKS, BUSES AND CHASSIS		
Union of South Africa	\$13,053,177	25,177	Japan	\$3,136,964	9,837
Belgium	7,039,863	13,434	Spain	2,952,570	5,685
Australia	5,384,601	13,798	Brazil	2,581,307	4,639
Japan	4,633,241	9,633	British India	2,478,311	7,142
United Kingdom	3,968,677	6,500	Union of South Africa	2,450,588	5,373
Sweden	3,807,113	7,546	Australia	2,447,476	5,753
Argentina	3,206,474	6,660	Argentina	2,028,232	4,780
British India	2,863,822	5,484	Belgium	1,870,485	5,365
Mexico	2,764,940	3,920	Mexico	1,622,379	2,475
Brazil	2,737,208	4,927	China	1,485,908	2,414
Netherlands	2,372,359	3,514	Sweden	1,424,552	4,000
Denmark	2,113,417	5,028	Persia	1,242,629	1,124
New Zealand	1,893,262	3,962	Netherlands	997,817	1,608
Philippine Islands	1,658,974	2,538	Philippine Islands	970,693	1,881
Hawaii	1,653,991	2,586	Palestine	883,506	1,216
China	1,386,275	1,914	Bolivia	868,837	1,118
Egypt	1,346,934	2,144	Denmark	827,862	2,606
Switzerland	1,294,082	2,048	Venezuela	818,456	1,519
Venezuela	1,280,763	2,115	Colombia	809,797	1,211
Morocco	1,255,066	2,008	Canada	768,976	1,043
Total	\$65,714,239	124,936	Total	\$32,667,345	70,789
Total—All Countries	\$80,604,563	148,387	Total—All Countries	\$45,125,359	93,766

U. S. Airplane and Engine Production*

	Airplanes				Airplane Engines			
	Units	Military Value	Units	Commercial Value	Units	Military Value	Units	Commercial Value
1926	532	\$6,154,708	604	\$2,716,319	842	\$4,080,571	.....	.....
1927	621	7,528,383	1,565	6,976,616	1,397	6,550,533	.....	.....
1928	1,219	19,066,379	3,542	17,194,298	2,620	12,407,920	632	\$979,600
1929	677	10,832,544	5,357	33,624,756	1,861	8,600,530	5,517	17,895,300
1930	747	10,723,720	1,937	10,746,042	1,841	10,823,423	1,925	6,255,493
1931	812	12,971,625	1,582	6,655,738	1,800	10,417,718	1,976	4,192,600
1932	593	10,389,316	549	2,337,899	1,085	6,370,678	815	2,898,371
1933	466	9,784,643	591	6,180,900	860	4,986,168	1,120	4,724,441
1934	437	8,836,509	772	9,957,602	688	5,162,710	2,048	10,270,500

*Aeronautical Chamber of Commerce of America, Inc., Aircraft Year Book for 1935.

Sales of Aircraft Parts*

Year	Aircraft			
	Military	Commercial	Miscellaneous	Total
1930	\$4,108,167	\$3,442,573	\$475,002	\$8,025,742
1931	4,627,838	1,912,481	499,857	7,039,932
1932	3,701,838	974,439	348,770	5,025,047
1933	3,127,255	945,336	140,340	4,212,931
1934	2,168,856	1,540,564	436,425	4,145,845

Year	Aircraft Engine			
	Military	Commercial	Miscellaneous	Total
1930	\$2,231,370	\$2,487,576	\$494,216	\$5,213,162
1931	3,904,739	1,747,654	267,400	5,919,793
1932	3,699,848	1,241,878	73,644	5,015,370
1933	1,961,033	1,567,604	67,843	3,596,480
1934	1,543,730	2,517,592	299,377	4,360,699

*Aeronautical Chamber of Commerce of America, Inc.

Scheduled Transport Operations of American Air Lines*

	1929	1930	1931	1932	1933	1934
Planes	619	637	753	655	615	550
Passengers	165,263	385,910	457,753	504,575	546,235	537,637
Air mail	7,096,930	†8,513,675	†9,351,195	†7,658,332	†7,644,646	7,155,281
Express	197,538	286,798	885,164	1,324,428	1,884,545	2,946,460
Scheduled miles flown	20,242,891	28,833,967	43,395,478	48,344,358	54,072,467	42,622,619
Employees	4,430	6,350	7,000	6,500	6,785	6,877
Number of operators	27	35	42	33	28	25

*Aircraft Year Books—Aeronautical Chamber of Commerce of America, Inc.

†Includes lines to South America.

Tire Production by Types

	1931	1932	1933	1934
Balloon casings	41,800,000	35,200,000	40,064,000	41,889,000
High-pressure casings	6,925,000	4,915,000	5,240,000	5,344,000
Total casings	48,725,000	40,115,000	45,304,000	47,233,000
Balloon inner tubes	39,200,000	31,200,000	36,383,000	40,323,000
High-pressure inner tubes	9,150,000	5,640,000	6,173,000	5,905,000
Total inner tubes	48,350,000	36,840,000	43,556,000	46,228,000
Solids and cushions	170,000	121,000	163,733	203,600

World Motor Vehicle Registrations by Years

	1934	1933	1932	1931	1930
Africa	408,380	383,227	369,814	370,880	351,931
America	1,863,618	1,827,754	1,896,380	2,013,977	2,097,289
Asia	543,035	506,925	486,292	566,353	551,467
Europe	6,559,751	6,052,758	5,498,704	5,586,320	5,287,472
Oceania	800,693	778,856	740,016	772,287	805,545
Total	10,175,477	9,549,520	8,991,206	9,309,817	9,093,704
United States	24,751,644	23,849,932	24,341,822	25,993,896	26,657,072
Grand Total	33,999,452	33,399,452	33,333,028	35,303,713	35,750,776

1,556,000 Motor Vehicles Scrapped in 1934

1924	1,102,000
1925	1,624,000
1926	1,802,000
1927	2,107,000
1928	2,507,000
1929	2,686,000
1930	2,878,000
1931	2,927,000
1932	2,396,000
1933	1,793,000
1934	1,556,000*

* Unadjusted.

Feb. Racing Toward 340,000 Goal; See 400,000 for March; Sales Gain

DETROIT, Feb. 21—Motor car production this month promises to attain the 340,000 units predicted earlier in *Automotive Industries* and may go even higher if certain obstacles holding back some companies are removed. March assemblies should easily top 400,000 units and possibly may reach 425,000. Indications point to the fact that April is likely to be the peak month this year, with a mild recession in output during the following two months.

The psychological effect of the gold decision will be to further loosen purse strings of car buyers and particularly should be stimulating to sales overseas which are so dependent on favorable exchange rates. A fairly large percentage of the cars coming off assembly lines are continuing to go almost directly into consumers' hands, although in some cases it is believed dealers are beginning to acquire stocks. Several prominent car manufacturers declare that the pressure from dealers for immediate delivery of cars has not been relieved. Even with factories working virtually at capacity, a few companies report that their backlog of unfilled orders has been growing.

The widespread distribution of retail sales, with sizeable increases registered in almost all sections of the country, is a notable and encouraging development. Only in one or two districts, such as the citrus fruit area in Florida where severe weather has done great damage, have sales failed to respond to the buying urge. Retail demand has been especially good in the Mississippi valley and the south, the improvement being attributed to enlarged farm incomes from higher commodity prices and to cash disbursements by the Federal government for crop curtailments.

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Wage Dispute Causes Strike at Myers Co.

Chrysler Supply Concern Shuts Plant as Workers Walkout on Election Eve.

TOLEDO, Feb. 20—The Myers Regulator Co., suppliers of window regulators and hardware for the Chrysler Corp., closed its plant at 3 p. m. today because of a strike among its employees. Two weeks ago the sub-Regional Labor Board of Ohio entered the dispute between the management and workers when a brief strike begun over wage differences. It is said a difference of two cents per hour in the wage rate led to the failure of the second shift reporting for work today. Three persons were reported hurt slightly in altercations arising from an unorganized picket line.

Officials of the Myers Co. stated its plant would remain closed until the present difficulties are settled. Recently, it is said, Chrysler officials threatened

to remove certain machinery in the Myers plant to Detroit plants of the Chrysler Corp.

The company was scheduled to hold a plant election among employees Thursday, but the present strike makes this impossible. Approximately 400 workers are affected by this latest walkout.

Eastman Asks Control of Transport Codes in Bill

Hearings on HR 5262, a bill to regulate interstate motor carriers, got under way this week before a sub-committee of the House Interstate Commerce Committee. Federal Coordinator Eastman, sponsor of the bill, was the first witness. Among other things he suggested that the Coordinator be authorized to take over the administration of transportation codes. A battle developed early over the extent of control the ICC should be given over intrastate rates with the National Association of Railroad and Utilities Commissioners fighting to mini-

mize such control and taking the position that it would rather have no bill than to have the doctrine of the so-called Shreveport rate cases apply.

Meanwhile the American Trucking Associations, Inc., reports that its statistical division is working 24 hours a day preparing the trucking industry's presentation on the bill.

A sub-committee of the Senate Interstate Commerce Committee will begin hearings on the bill on Feb. 25.

Sears to Organize Foreign Sales Co.

Sears, Roebuck and Co. plan to organize a subsidiary, Sears, International, Inc., according to the British Motor Trader, to dispose of surplus stocks abroad. The plan, says the British journal, does not include competing with British mail-order houses or the creation of a selling organization, but that merchandise will be distributed through ordinary wholesale channels. Some of the merchandise the new company hopes to sell in Great Britain includes tires, inner tubes, spark plugs, garage accessories and electric equipment.

Greene, Hilman Direct DeSoto Adv. and Service

Burch E. Greene has been appointed director of advertising and sales promotion and W. A. Hilman, director of service for the De Soto organization, Byron G. Foy, De Soto president, has announced.

Mr. Greene and Mr. Hilman now hold similar positions with the Chrysler Sales Corporation and will continue to supervise the advertising and service activities of the Chrysler unit as well as De Soto.

AMA's Gift Enables Harvard Research Bureau to Expand Street Safety Study

Greater safety on the highways and the elimination of costly traffic congestion are twin objectives of an expanded program of highway research being initiated at the Bureau for Street Traffic Research at Harvard University, it has been announced. Reorganization and expansion of the research activities of the university's Bureau for Street Traffic Research have been made possible through a gift to the university by the Automobile Manufacturers' Association.

This contribution by the Automobile Manufacturers' Association indicates that leaders of the motor industry recognize the

opportunities for improving the accident situation and increasing the efficiency of highway transportation through the scientific development of sound engineering and administrative principles.

"Although all studies of accident causes are unanimous in their conclusions that from 80 to 90 per cent of traffic mishaps are traceable directly to some form of human fallibility on the part of the individual motorist or pedestrian," Alfred Reeves, AMA vice-president, said, "there is abundant evidence that through engineering, safeguards for the greater protection of highway users can be devised."

The new program of Harvard's Bureau for Street Traffic Research will be conducted by its Director, Dr. McClintock, along the same lines as those followed in the past. Falling within the scope of the program are such subjects as rational and uniform legislation and ordinances, police organization and enforcement of traffic laws, efficient traffic engineering technique and organization, and the design of new and basic types of traffic facilities especially for urban areas. The Bureau will continue its efforts to educate and develop traffic experts

Ford Puts March Schedule at 160,000

The largest domestic production of Ford V-8 cars and trucks since the V-8 engine was introduced, has been scheduled for March, the projected total being 160,000 units requiring a daily output of 6000. This compares with 77,947 last year and will bring output in the first quarter to more than 390,000 units.

through the cooperation of the university's Department of Government, and its Schools of Engineering, Business Administration and City Planning.

Under the Bureau's plan for cooperation with governmental agencies, provision is made whereby responsible officials of state and local governments may call upon the Bureau staff for information and advice bearing upon local problems of safety and congestion.

Coincident with the announcement of the Bureau's expanded program, it was revealed that Maxwell N. Halsey has been appointed its Assistant Director. A graduate of the Harvard organization, Mr. Halsey has held numerous responsible engineering positions in engineering and private organizations interested in traffic control problems, the most recent being that of traffic engineer for the National Bureau of Casualty and Surety Underwriters.

New Indiana Truck at \$695

A new streamlined Indiana truck with a gross capacity of 11,000 lbs. and priced at \$695 is announced by the White Motor Co. Deliveries will begin March 15. The 1935 production schedule on this model is 10,000. The new truck has a 263 cu. in. engine, hydraulic brakes, ventilated disk wheels, deep-skirted fenders, cadmium-plated radiator grille and a sedan type cab.

APEM Endorses Code Amendment Requiring Time & Half Over 48 Hrs.

A resolution endorsing an amendment to the APEM code requiring member employers to pay time and a half for all hours worked in excess of 48 per week, was unanimously adopted by the annual meeting of that organization held in Detroit on February 15. This amendment will make the parts makers subject to the same wage rules as have been in effect in the automobile manufacturing industry since the President extended its code in amended form on January 31.

C. C. Carlton was re-elected president of the association. The directors also named Ben F. Hopkins, Cleveland Graphite Bronze, vice-president; M. C. DeWitt, Champion Spark Plug, secretary, and William Hancock, of McCord, treasurer. C. O. Skinner continues as executive secretary.

The following were elected directors-at-large: C. S. Davis, Borg Warner; C. E. Wilson, General Motors; Vincent Bendix, Bendix Products; Mr. Hopkins, Mr. DeWitt, Lothair Teetor, Perfect Circle; and Hugh Weed, Carter Carburetor. The executive

committee consists of: Messrs. Carlton, Bendix, Davis, and Hopkins.

The meeting discussed at length a proposed amendment to the code which will come up for hearing in Washington on February 27. This amendment more clearly defines the coverage of the APEM code and is intended to eliminate existing conflicts with various code authorities as to who has authority over certain manufacturers.

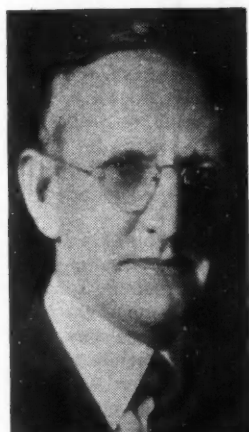
Mr. Carlton reported that a total of 10 supplements to the code have been approved and that five more await approval. He said that fair trade practices provided for the industry were generally disappointing, but he expressed the belief that policy changes impending in Washington which would permit insertion of better clauses on "selling below cost" and a more practical price filing provision.

There have been few cases of flagrant code violation, Mr. Carlton stated, and all of them have been remedied, in most cases violators making restitution which in one instance amounted to over \$6,000.

Mr. Carlton also discussed efforts of the
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APEM Officers and Directors

(Ben F. Hopkins,
not shown, is
vice - president)



C. C. Carlton,
President



C. O. Skinner
Exec. Secy.



M. C. DeWitt,
Secretary



Wm. Hancock,
Treasurer



Vincent Bendix



C. S. Davis



Hugh H. C. Weed



C. E. Wilson



Lothair Teetor

Steel Price Changes Believed Unlikely

Begin Filing 2d Quarter Rates; No Slowing Down of Motor Purchases Seen

Filing of second-quarter prices with the American Iron and Steel Institute as code authority has begun. It is intimated there will be no changes from current quotations. If this proves true, steel buyers will have at least three months' respite from advances that may result in commodity values in general in consequence of the Supreme Court's gold decision.

The American Iron and Steel Institute's report for this week's rate of operations—49.1 per cent of ingot capacity—denoting a dip of approximately 3 per cent from the preceding week's operating rate, is interpreted in some quarters as denoting tardiness in adjusting primary production to finished steel demand rather than any slowing down in steel buying. One hears here and there of automobile manufacturers deferring the placing of orders for steel bars because of their inability to obtain as prompt deliveries of automobile sheets as perfectly coordinated assembly schedules call for.

Automotive buyers are well aware of the need for anticipating their requirements of full-finished sheets more so than those for other descriptions of steel. Speeding up of Chevrolet production next month is expected to make up for what easing off in Ford takings might come to pass. Automotive alloy steel specialists continue to operate at a satisfactory rate. Demand for manufacturing wire for wheels and upholstery springs is well maintained. Movement of bolts and nuts into automotive consumption continues brisk, predictions of price advances at the earliest possible moment being frequently heard.

Pig Iron—Takings by automotive foundries have now reached the point where Lake furnaces are shipping more iron than they are producing, the remedy for this condition being the lighting of furnaces now idle and some of which are being made ready for early resumption of output. The Middle West price for both No. 2 foundry and malleable continues to be \$18.50, basing point.

Aluminum—Quotations for virgin metal are unchanged. The tone of the market for secondary metal is a shade easier, reflecting the better supply of scrap.

Copper—Copper and brass fabricators are taking relatively good-sized tonnages of "Blue Eagle" copper. The picture of the world market is also somewhat brighter, world stocks of refined copper having been reduced by 7,000 tons in January. The "outside" market is nominally quoted at 7.60 cents, as compared with the "Blue Eagle" price of 9 cents, delivered Connecticut point.

Tin—Following spells of weakness, resulting in part from the uncertainty over the gold decision and in part from the aftermath of the disturbance in the London market, Straits tin staged a recovery, spot

metal being held at 50.45 cents at the market's close on Monday.

Lead—One of the two leading marketers continued to quote \$1 per ton higher than the other at the opening of the week. An advance in ore prices gave the market a stronger undertone, immediate demand, however, being light.

Zinc—Firm and quiet.

GM Canadian Output for 5 Weeks Double '34 Total

Production of passenger cars and trucks for the first five weeks of this year by General Motors of Canada, Ltd., is more than double the output for the corresponding period of last year, according to C. E. McTavish, general sales manager. Quantity production has begun on the new model Master Chevrolet, he said.

Production schedules on both Pontiac and Oldsmobile have been increased, Mr. McTavish reported, as evidenced in the delivery of more than 1100 more of these cars than during the same period of 1934. Truck assembly for the period has increased 35 per cent over the same time last year.

Agency for Accrediting Engineering Schools Ok'd

Approval of the Engineers' Council for Professional Development as the agency for accrediting engineering colleges was conferred by the American Institute of Electrical Engineers recently, thus completing the authorizations needed to inaugurate the accrediting procedure which has already been approved by the other participating bodies—American Society of Civil Engineers, American Institute of Mining and Metallurgical Engineers, The American Society of Mechanical Engineers, Society for the Promotion of Engineering Education and National Council of State Boards of Engineering Examiners.

Accrediting of individual institutions and of curricula offered by them will be upon invitation of the institutions. Formal notification of the launching of the accrediting program will be sent by the committee to officials of the institutions in the near future.

Inquiries as to any phase of accrediting should be addressed to the Committee on Engineering Schools, Engineers' Council for Professional Development, George T. Seabury, secretary, 29 West 39th Street, New York, N. Y.

Discrimination No Problem; Bargaining Progresses in Industry, ALB Reports

Against a background of more than ten months spent in grappling at first hand with the labor problems of the automotive industry, the Automobile Labor Board, in a report to the President made public this week, paints a picture that contrasts sharply with the representations made in the Henderson report on the basis of a survey covering a few weeks.

The Henderson report, it will be recalled, charged that espionage systems are widespread, that the industry discriminates against age, and that hiring and rehiring methods are inequitable. It also concluded that many of the complaints against management—such as poor working conditions, terror, and discrimination—will disappear when and if facilities are fully extended for collective bargaining, a pointed thrust at the Automobile Labor Board.

Now there doesn't seem to be much point in maintaining espionage systems unless the information they produce is to be used to discriminate in one way or another against employees. On this point the ALB report says: "It is the Board's judgment after ten months of experience in the industry that discrimination caused by union activity or union membership is not a problem of any magnitude at the present time and has not been for some time in the past. Wherever agreements are made between the industry and the Board or the industry and labor to return men to work or to restore employees their seniority, it is the Board's information that these agreements have been fairly ob-

served. Furthermore, in all of the many instances in which the Board has ordered individuals or groups back to work, they have been returned to work so far as the Board knows. Few cases have been brought to the Board's attention of violation of its orders and decisions."

The charges of inequitable hiring and rehiring methods and of discrimination against age, are all a part of the seniority issue. On this important topic, the ALB report says that since its seniority rules were promulgated, "the automobile industry has gone through one complete season of lay-offs and a large part of the next following season of rehiring. In view of the turnover of labor which normally takes place during such periods, the number of cases the Board has received involving seniority is relatively small. This fact and the Board's general familiarity with the situation lead us to conclude that in general the industry has observed the rules fairly and carefully. . . . The seniority system now in effect depends upon the President's Settlement. . . . Under the system and the Board's rules and rulings, every worker in the industry under the Board is protected by an orderly and legal method in his lay-off and rehiring, with review by the Board if necessary. He thus finds himself protected not only against the possibility of the lay-off period or the period of rehiring being used as a method of discriminating against him for ulterior motives growing either out of the struggles about organizing or out of alleged personal favoritism of the lower supervision, which causes so much uneasiness in the minds of the workers, but above all against the general hazards and uncertainties of lay-off and rehiring. . . ."

The reference to "personal favoritism of the lower supervision" is interesting in connection with the emphasis the Henderson report places on the alleged tyrannical practices of the industry's foremen.

The question of whether collective bargaining is—or is not, as the Henderson report concludes—being practiced in the industry, gets an emphatic answer in the ALB report. "So far as the practice of industrial relation in the industry is concerned, there can be no question but that the levels of prevailing relationships have been materially raised during the past year, and that collective bargaining between the management and representatives of many groups of workers is being extensively carried on through the industry. . . . In many plants the plant management regularly negotiates with shop stewards representing local organizations of the American Federation of Labor, and the Board has had reports from the officers of various unions that their relations with the company are satisfactory. The Board has dealt promptly with all complaints that representatives of employees are not being met for purposes of negotiating and bargaining.

Meet With AFL Unions

"Officers of the American Federation of Labor local unions in the automobile manufacturing industry constantly are engaged in negotiation with the managements on various matters. The great number of cases settled as a result of these processes of conference and negotiation is the best test of the degree to which the methods of collective bargaining are being observed within the industry. At the time of the large seasonal lay-off last summer, in one of the plants in the industry the officers of the union took up all of their complaints regarding the application of the seniority rules directly with the management of the company. After more than ten thousand employees had been laid off, there were only twelve disputed claims which were presented to the Board. . . . A similar record can be produced for a large number of plants in the industry.

"The Board regards collective bargaining as a peaceful process which can only be successfully worked out with patience and with understanding. It is perfectly clear from our experience that long formed habits cannot be overnight changed by fiat, and that the experience and skill requisite to successful negotiators cannot be suddenly supplied by mandate. Both the industry and employees have already gone a long way in learning what is required of them under the law and orders of the Board, and in adjusting their policy to these requirements. The opportunities which now exist in the industry for employees to present their grievances and to have them considered and disposed of in joint conferences are of inestimable value to the automobile workers and are so regarded by them."

Discussing elections, the report says ". . . 90 per cent of the eligible voters voted, and 94 per cent of those that worked on the day of the election voted. Those who have not voted represent, in the main, those employees who happened to be absent on the day of the election. They are clearly not members of any group who either have been

instructed to abstain from voting or who themselves have resolved to do so."

Representatives elected have been invited to confer with the Board and several such conferences have been held, the ALB report says. At these meetings questions of immediate concern have been discussed as well as such details as time and place of meetings, the appropriate relations between the representatives and their constituents, the source and method of payment for time lost when acting as a representative and the like. On all of these matters the Board is working and will lay down rules and regulations governing the conduct of industrial relations under this relationship.

FWD Sales Up 91% in '34; Assets Eight Times Debts

Sales of FWD trucks during 1934 increased 91 per cent over 1933 and the increase in total business for the Four Wheel Drive Auto Co. from all sources climbed 69.2 per cent over the previous year, Walter A. Olen, president, announced at the annual stockholders' meeting last week. The meeting was held at the Clintonville, Wis., plant of the company.

Mr. Olen also reported there has been a 60 per cent increase in the total of man-hours of employment, and 11 per cent of the work increase was attributable to the application of the NRA code. Each man in the plant has a \$1000 life insurance policy, partially paid by the company, Mr. Olen reported, and each employee also carries a health and accident policy. A chart was exhibited at the meeting showing the company's current assets 8.9 times greater than current liabilities.

Packard Schedules 4500 New Model 120 per Month

The new Packard plant in Detroit in which the Packard 120 is being produced officially went into production last Wednesday. Frank Couzens, Detroit mayor, drove the first of the new cars off the assembly line. At that time company officials announced the company will build 2000 this month, 4000 in March and 4500 per month after that.

Canadian Govt. Adamant On Drawback Enforcement

Efforts of the automobile industry within the past few weeks to dissuade the Canadian government from pursuing the new method of enforcing the drawback item have failed to bring a modification of the policy. Under the terms of the drawback item on automobile parts, a rebate of duty is allowed if the content of the finished product represents Canadian material and/or wages of 50 per cent. Prior to July, 1934, successive governments permitted manufacturers to qualify for the drawback on the basis of total plant production rather than on individual models.

However, according to officers of the Crown, the law intends the item to be administered on the basis of individual models and the change of enforcement procedure has been ordered. An amendment to the act, it is pointed out, would be necessary to retain the former regulations desired by manufacturers, and it is held unlikely the government has any intention of introducing such an amendment. It has been said, though, that the cabinet is not adverse to facilitating a reference of the question to the Tariff Board.

Commercial Vehicle Body Code Amendment Sought

An application to amend the commercial vehicle body industry's code has been submitted by the code authority for that industry. It is proposed to delete the parenthetical phrase in Article II "except those manufactured by or sold to the manufacturer or assembler of motor vehicle chassis" and substitute, in brackets, "except those manufactured by automobile manufacturers or assemblers and those manufactured by manufacturers who sell exclusively to automobile manufacturers or assemblers." A hearing on the application for the amendment will be held before Jo G. Roberts, NRA Deputy Administrator, in Washington, March 5.

Briggs Employment Gains

Employment at the Detroit plants of the Briggs Manufacturing Co. has risen to 29,000 workers, of which approximately 6500 were added during January, according to an announcement by W. P. Brown, general manager. The plants, the report indicates, are operating at a rate near to capacity.



The new and larger factory of the Mallory Electric Corporation at Fullerton and Cloverdale Avenues, Detroit

Green Tour Winds Up With Detroit Broadcast; Unions Consider Merger

DETROIT, Feb. 21—A. F. of L. president William Green's tour of automotive centers this week ended with a meeting in Milwaukee on Wednesday following which he left for Washington to testify in connection with pending legislation in Congress. He will be in Detroit on Saturday, however, when his speech will be broadcast over an NBC hook-up. Meetings scheduled for Lansing and Flint consequently were not held, the Federation claiming that they were cancelled before Mr. Green began his trip.

It is understood that the switch in Mr. Green's schedule in no way changes the plans of the Federation to formulate demands to be made on certain key plants. A strike vote already has been taken in one parts plant in Detroit and one is reported to be scheduled shortly by the federal union at the plant of the Kelsey Hayes Wheel Corp.

The Detroit Labor News, official paper of the Detroit Federation of Labor, in a leading story in its last issue, invited the MESA, the Society of Designing Engineers and the Dingmens' Association to join the American Federation of Labor, stating that the history of divisions within labor's ranks into various industries has shown that such disruption was fatal to unionization.

Matthew Smith, general secretary of the MESA, has issued a formal reply suggesting that contact committees from all unions involved meet and formulate recommendations to be carried back to their respective bodies. He stated that the unions should unite on a program of immediate demands involving the 30-hr. week, \$40 minimum weekly wage and full wage insurance for unemployed workers. He declared also there should be an agreement on "rank and file control of officials and policy," thus voicing his objection to union operations being controlled by an appointed executive as in the set-up of the A. F. of L. unions.

Declaring that his organization has several thousand former members of the International Association of Machinists, an A. F. of L. affiliate, Mr. Smith asserts that if the MESA merged with the Federation, its members immediately would be passed through the federal locals back into the machinists' union. The matter then devolves into the question, "Will the MESA agree to be absorbed by the IAM? Will 7000 tool and die makers agree to join the IAM local with less than 100 members?"

Incidentally press reports say that in the coming MESA elections there is a possibility that Mr. Smith will be dislodged from his position of leadership.

DETROIT, Feb. 20.—President William Green, of the American Federation of Labor, is authorized to request a conference with Alfred P. Sloan, Jr., president of General Motors, for the purpose of negotiating a mutually satisfactory agreement relating to wages, hours and conditions of employment to be approved by the directors of the corporation and members of the United Automobile Workers Unions, according to a resolution unanimously passed at mass meetings held this week by the Federa-

tion in Cleveland, Toledo, St. Louis and South Bend, at which Mr. Green was the chief speaker.

The resolution condemns "those who prevented the President from having the benefit of the advice and counsel of our duly accredited representatives" in the renewal of the automobile code and protested the continuation of the Automobile Labor Board, asking that a new Board be set up under the provisions of Joint Resolution No. 44 of the last session of Congress. The resolution also expressed gratitude to Senator Lewis B. Schwellenbach for his interest in sponsoring an investigation of the automobile industry. The resolution is to be sent to President Roosevelt, President Green of the Federation, and Secretary of Labor Perkins.

In the resolution, the Federation is designated by those present at the meetings as "our bargaining agency between employer and employee in the automobile industry." Mr. Green, in addressing his audiences, warned that "if industrial strife results, it will be because of the failure of the employer to concede to his employees rights and privileges which the employer seeks to utilize for his own benefit while denying the same rights and privileges to his own employees."

AFL Detroit Meeting

It is understood that a resolution similar in every respect to the one passed in the four cities already mentioned was offered and presumably adopted in Milwaukee. Arrangements have been made for a national hook-up for the Detroit talk Saturday night over the network of the National Broadcasting System. It is reported that NBC is donating the time and will give the manufacturers an opportunity to reply later if they so desire.

The National Council of the United Automobile Workers Federal Labor Unions affiliated with the A. F. of L. will convene in Detroit on Feb. 23 with Mr. Green present, to lay general plans and to formulate demands on the automobile companies. It appears clear from the trend of the A. F. of L. program, that the Federation intends to make demands on certain companies. It is felt that these demands will be refused and that a strike is then likely to be attempted in the next two weeks. It seems to be the Federation's hope that it can tie up production sufficiently well that President Roosevelt will intervene, and as one of its peace terms the Federation would ask for abolition of the Automobile Labor Board.

In his speeches, Mr. Green has been advocating abolition of the Automobile Labor Board, the six-hour, five-day week without any reduction in pay, the annual wage basis, and elimination of company unions. He stated that there were now 176 automotive unions affiliated with the Federation and that they are to be formed into the Inter-

national Union of Automobile Workers. When asked about a general strike in the industry March 1, Mr. Green said plans on that had not gone far but he recalled that talk of a general strike got action. "Those who would be free must strike the blow themselves," he declared. "But if reason fails and logic is ineffective we will lead our forces on the battle field and fight until we force recognition."

At the Cleveland meeting, F. J. Dillon, the Federation's Detroit organizer, struck a belligerent note when he said, "We are here to see if you are prepared to move out and stay out when the order comes." Mr. Dillon incidentally has recently addressed "large and enthusiastic audiences of automobile workers," an A. F. of L. statement says, in Washington, D. C., Atlanta, St. Louis, Janesville, and Chicago. At all of these meetings a resolution was adopted similar to the one voted at the Green meetings this week.

While the Federation apparently plans to use the endorsement it received at the Green and Dillon meetings to prove that it represents automotive workers, the difficulties it will face in authenticating its claim are obvious. This will be particularly true in Detroit, where in election after election held by the ALB, a government agency, only very small minorities have indicated that they wanted to be represented by Federation unions.

Last week, it is reported, a Federation local in Cleveland submitted a contract to Fisher Body, which labor leaders are said to view as a move for a determination of the questions at issue. The contract is said to ask for the six-hour, five-day week, minimum annual wages of \$1560 for unskilled and of \$1820 for skilled workers, arbitration of disputes, and full pay for employees found to have been fired unjustly.

Formation of the proposed International Union of Automobile Workers would put the automotive unions in much the same position as organizations in other industries. At present the locals are affiliated directly with the Federation, but under the new plan they would be members of the International which in turn would be affiliated with the Federation.

First ALB elections outside of the City of Detroit are being held this week. The nominating elections at the Pontiac and Fisher plants in Pontiac were scheduled for Feb. 21, and at General Motors Truck in Pontiac and at Fisher Body in Cleveland on Feb. 22. The final election at Packard is to be held in Detroit next Tuesday and on the same day nominating elections will be held at Graham's, Warren Avenue, Detroit, and Wayne, Mich., plants. Next Wednesday nominating elections will be held at the Olds plant in Lansing during the week at the Fisher and Reo plants in that city.

Out of a total of 66,122 votes cast in 15 plant elections in Detroit through Feb. 12, a total of 50,121 workers, or 76 per cent, designated no union affiliation. Employee associations drew 7,639 votes, 11 per cent, the AAWA 3,173 or five per cent, and the A. F. of L., 2596, or four per cent.

Through application of proportional representation, the ALB has increased the membership of the AAWA on the Hudson bargaining committee to put it on a par with the Hudson Industrial Association.

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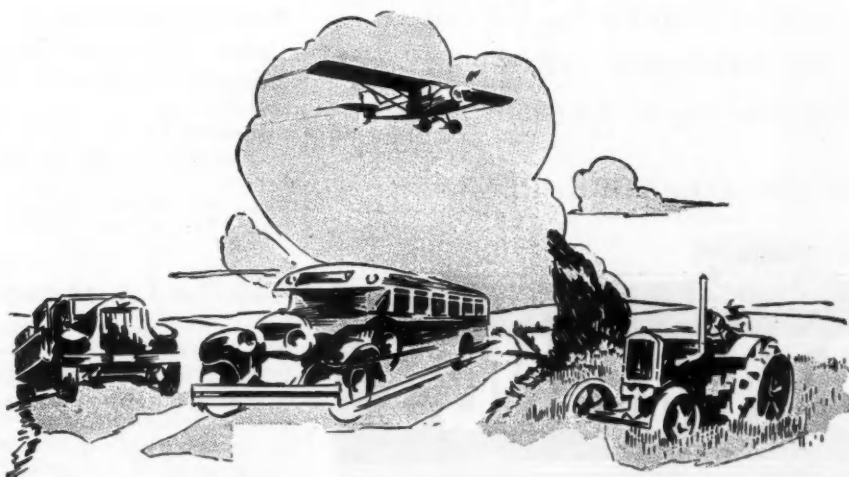
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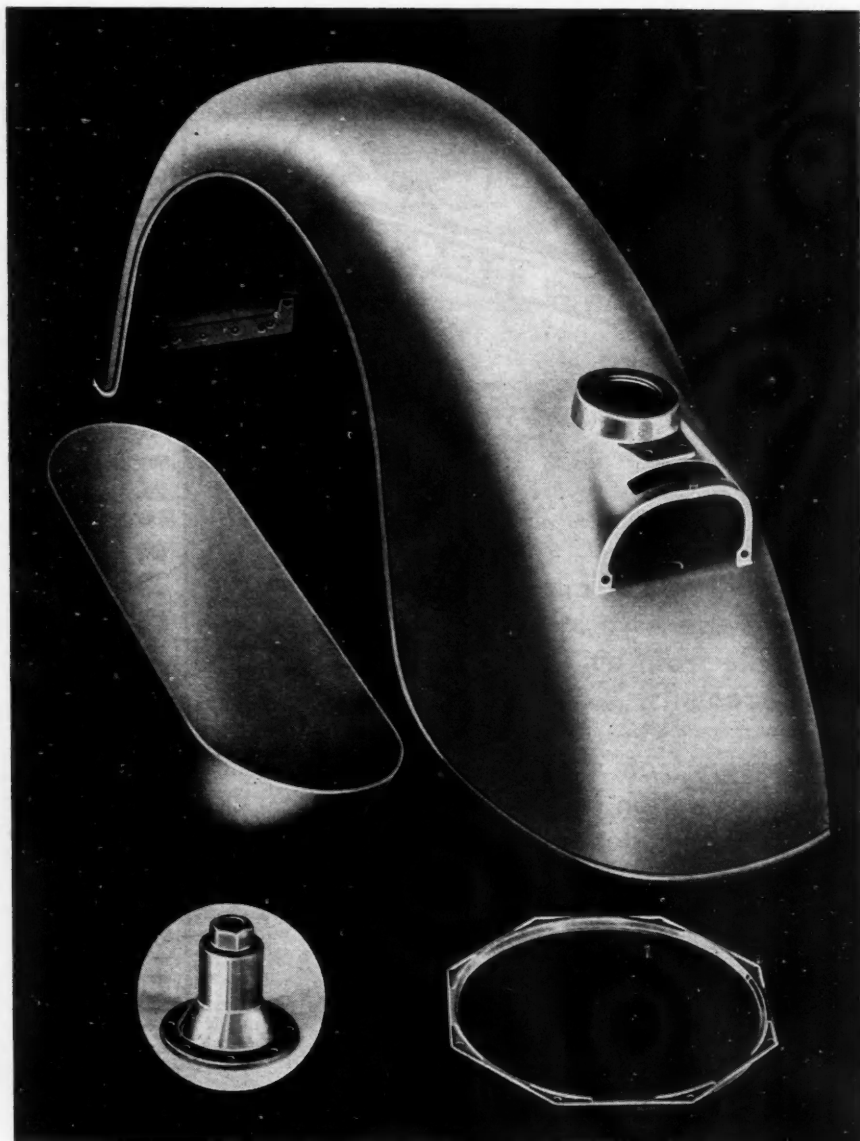
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GM Plans Production of Diesel-Electric Equipment

According to Alfred P. Sloan, Jr., GM president, General Motors plans to enter the railroad field with a line of diesel-electric locomotive equipment. GM is said to have taken an option on property near Chicago where a manufacturing plant is to be erected as a part of the Electro-Motive Corp. The new set-up will enable General Motors to produce complete diesel-electric locomotives for switching and for hauling standard railroad rolling stock.

New Coil Spring Concern to Open in Adrian, Mich.

The Stubnitz-Greene Spring Corp., said to be a \$100,000 concern, will manufacture coil springs for automobile upholstery and furniture, and will occupy the former plant of the Adrian Wire Fence Co. at Adrian, Mich. Headed by M. Stubnitz as president and general manager and D. A. Greene as vice-president and treasurer, the company began moving into the Adrian plant this week. When in operation it is reported the concern will employ between 200 and 300 men.

B. H. Gerker Joins Carter

B. H. Gerker, formerly resident engineer with Chevrolet Motor Company at Flint, has been appointed production engineer with the Carter Carburetor Corporation of St. Louis.

The rapid growth of Carter Carburetor Corporation and greatly increased production, calls for an increased personnel in the Standards Division.

Woolman on NSPA Board

L. F. Woolman of the Allen Electric & Equipment Corp., Kalamazoo, Mich., has been appointed as ad interim director of the National Standard Parts Association by President Dave Rodger, to fill the vacancy created by the resignation of H. M. Smith. At the January board meeting Mr. Smith announced he had severed his connection with the Kellogg Equipment Corp., of which he was the official delegate.

Name Buchenberg to Ohio Labor Relations Board

The National Labor Relations Board has appointed A. E. Buchenberg, director of engineering for the Electric Auto-Lite Co. as a member of the Toledo panel of the Regional Labor Board for the eighth district. His appointment fills the vacancy created by the death of John A. Schultz, Jr.

Faeh C.A.T.A. Manager

A. C. Faeh, general manager of the Chicago Automobile Trade Association from 1930 to 1932, and more recently manager of the 1935 annual Chicago automobile show at the Coliseum, has been reappointed as the association's general manager, it is announced by M. J. Lanahan, president.

Business in Brief

Written by the Guaranty Trust Co., New York, exclusively for Automotive Industries

There was a slackening in activity in some branches of industry last week, but others continued to register gains. After 16 successive weeks of increases, steel operations fell off moderately. There was a further decline in commercial failures. Most of the losses in commodity markets at the beginning of the week were made up by strength during the latter part. A good volume of both retail and wholesale trade was reported.

Car Loadings Decline

Railway freight loadings during the week ended Feb. 9 totaled 592,560 cars, which marks a decrease of 5604 cars below those during the preceding week, an increase of 18,662 cars above those a year ago, and an increase of 89,897 cars above those two years ago.

Store Sales Lower

Sales of department stores during January decreased by more than the estimated seasonal amount. The preliminary adjusted index of the Federal Reserve Board for that month stood at 72, based on the 1923-25 average as 100, as against 76 for December and 73 for November.

Chain Sales Gain

Sales of 22 store chains during January amounted to \$111,495,200, which marks an increase of 4.5 per cent above those in the corresponding period last year. Sales of two mail order companies for January were 12.3 per cent above those a year ago.

More Current Produced

Production of electricity by the electric light and power industry during the week ended Feb. 9 was 6.8 per cent above that in the corresponding period last year.

USCC Report Encouraging

A report issued by the Chamber of Commerce of the United States indicated that business improvement continued during last month. It was stated that industrial production last year was about 25 per cent above that in 1932, which was the low year of the depression.

Crude Oil Output Up

Average daily crude oil production for the week ended Feb. 9 amounted to 2,511,150 barrels, as against 2,448,000 barrels for the week before and 2,284,200 barrels for a year ago.

Fisher's Index Higher

Professor Fisher's index of wholesale commodity prices for the week ended Feb. 16 stood at 82.4, as against 81.7 the week before and 81.6 two weeks before.

Federal Reserve Statement

The consolidated statement of the Federal Reserve banks for the week ended Feb. 13 showed an increase of \$1,000,000 in holdings of discounted bills. Holdings of bills bought in the open market and of government securities remained unchanged.

SAE Fixes Procedure for Giving Lubrication Data

A uniform and simplified procedure for supplying motor-vehicle lubrication data by the equipment manufacturer to the various interested organizations such as the oil companies, trade papers, etc., has been developed by the lubricants division of the SAE Standards Committee.

In accordance with the committee's recommendations, the SAE has printed a standard form—Motor Vehicle Lubrication Data Form—in four sheets, containing all the information necessary to cover every phase of the lubrication of any vehicle. By using this form, the manufacturer can fill in the approved data and then make copies by blueprint-

ing, photostating, or lithographing. These copies would be mailed to interested people in much the same fashion as the AMA specifications questionnaire.

This project originated with a suggestion made some time ago by L. A. Danse of Cadillac Motor Car Co. The committee appointed to develop the project consisted of Dr. K. G. Mackenzie, Sydney Bevin, C. M. Larson, G. A. Round, E. W. Upham, H. C. Mougey and A. L. Clayden.

J-M Publishes "Noise Fighters"

Johns-Manville has just published a booklet entitled "Noise Fighters" describing the work of its acoustical research laboratories, which include, among other activities, the study of automobile body noises.

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Merz Succeeds Edenburn as Indianapolis Steward

Charles Merz, former race driver, has been selected to succeed the late W. D. Edenburn as steward in charge of the annual 500-mile race at the Indianapolis Speedway, and official representative of the Contest Board of the American Automobile Association. As such he will be in charge of all drivers during both their qualifying runs and their actual competition and will take an actual part in the settlement of all disputes.

ALB's End, 30-hr. Week Sought by Mich. AFL

Resolutions favoring a 30-hour week for Michigan industries, and a request that President Roosevelt abolish the Automobile Labor Board and place the functions of this board in the hands of the National Labor Relations Board were passed at the annual state convention of the American Federation of Labor in Lansing last week.

Conditions in automobile plants throughout the state were attacked by several speakers at the meeting, and it was indicated that definite action to bring about changes would be taken before March 1.



First Packard 120 Off the Line

Alvan Macauley, Packard president, and Mayor Frank Couzens of Detroit participate in a broadcast of the ceremonies held in connection with putting the new medium-priced Packard into production

President Asks NRA Extension, Leaves Job of Solving Problems to Congress

WASHINGTON, Feb. 20—Leaving to Congress the job of working out the detailed answers to many of the problems that have plagued NRA, President Roosevelt today urged extension of the National Industrial Recovery Act for two years, continuing its fundamental purposes and principles.

His recommendations, which were couched in general terms, may be summarized as follows:

Further definition of the policy and standards of the Act to clarify the administrative job.

The government should have power to impose codes consisting of minimum standards of fair competition, including particularly labor standards.

Collective bargaining rights should be protected.

Fundamental principles of anti-trust laws should be more adequately applied with "private price fixing" barred. In natural resource industries, destructive price-cutting and competition should be prevented under government supervision.

The way to enforce laws, codes, etc., relating to industrial practices is not to put people in jail. By implication, the President appears to favor wider use of injunctions and of "cease and desist orders."

Detailed recommendations along these lines, but in rough form have been made by various departments and agencies of the government, the President indicated, and are available to Congress.

The President's reference to "private price fixing" is not interpreted as preclud-

ing open price filing under proper conditions.

Regent Maroon Preferred Car Color, Survey Shows

A questionnaire, conducted by the Automobile Color Index, and sent to approximately 1000 automobile executives, designers, dealers and advertising men, shows that Regent maroon, a very dark and heavy shade, is the leading color preferred this year for motor cars. Each recipient of the

questionnaire was asked to make a first, second, and third choice from 72 actual samples of colors sent. The answers also showed that blue is still a favorite, for four out of the 10 selections gave blue, in one shade or another, as a preference.

Flanagan Joins Rowland

James F. Flanagan, who for the past 16 years has been vice president and secretary of the Burton Auto Spring Corporation of Chicago, has joined the firm of William and Harvey Rowland, Inc., Philadelphia, which he will represent in the west and middle-west, with headquarters in Chicago. The Rowland firm has a manufacturing plant in Chicago from which it supplies the jobbing trade in the western part of the country.

N.A.M. Tabulates Security Bill Costs

The National Association of Manufacturers has made the following tabulation of the direct costs to industrial employers of the Social Security Bill now before Congress.

Annual Payroll	1936		1937		1947	1957
	Minimum	Maximum	Minimum	Maximum		
\$100,000	\$1,000	\$3,000	\$1,500	\$3,500	\$4,500	\$5,500
500,000	5,000	15,000	7,500	17,500	22,500	27,500
1,000,000	10,000	30,000	15,000	35,000	45,000	55,000
3,000,000	30,000	90,000	45,000	105,000	135,000	165,000
10,000,000	100,000	300,000	150,000	350,000	450,000	550,000

In addition to this direct cost is the employer's share of additional Federal expenditures now provided in the bill—\$217,500,000.

In addition also is the employer's share of state old age assistance plan, state mothers pension plans, state plans for child health, all provided for in this bill.

The employer must eventually also pay huge special expenditures which the old age assistance and old age pension provisions of the act will require, since as now proposed the costs set forth above will be insufficient to keep the plans solvent.

Senate Judiciary Committee Gets Black 30-hr. Bill Despite Bitter Opposition

WASHINGTON, Feb. 21 — Opposed by the administration and bitterly fought by industry, the Black 30-hr. Bill was ordered favorably reported to the Senate Judiciary Committee by a special subcommittee late yesterday. No announcement of the subcommittee's action was made, but authoritative sources revealed that the measure was endorsed and it will be considered next Monday before the full committee. Senator Austin, Republican from Connecticut, has announced he will present a minority report.

The Connery 30-hr. Bill is somewhat different from the Black measure, but both provide a rigid 30-hr. week. Representative Connery is preparing to bring his bill up before the Committee on Labor for reporting to the House.

Despite industry's contention that passage of either of these bills would mean more rather than less unemployment, supporters of the measures, urged on by the American Federation of Labor, are pushing enactment of the legislation vigorously. Many believe that the legislation will be passed by both branches of Congress with opponents confident that the President will veto it.

Coming on top of these developments, Senator Wagner today re-introduced his Labor Disputes Bill. The Bill provides for majority representation, prohibits financing of labor organizations by employers and in general is patterned after the railway labor law.

Report New Franklin Car in \$1000 Class

Plans for the introduction of a new air-cooled Franklin car to sell in the \$1,000 class have been announced by J. E. Williams, president of Franklin Motors, Inc., according to recent reports. Some delay, it is reported, has been experienced in completing the financial details of the new company following acquisition of the assets of the H. H. Franklin Co.

Bigness Through Skill Economically Justified

During his interview this week with the press regarding the Administration's recommendation for continuation of the National Industrial Recovery Act, Donald Richberg, National Emergency Committee director, was asked about so-called monopolistic practices as related to the automotive industry. His attention called to the Henderson report which spoke of the position of the "big three" in the industry, Mr. Richberg said there was no question about that tendency, but, he pointed out, it has nothing to do with codification. It is, he declared, a matter of efficiency. There has been a steady increase in wages and quality, he declared, and a decline in prices.

"Where large enterprise is built on efficiency it has economic justification," said Mr. Richberg. "There is no justification where it is built up by sweating labor."

Ford Rouge Plant Current Consumption at '29 Level

The electric current consumption at the Rouge plant of the Ford company is reported to be at an average of 61,000,000 kw.hr. per month, paralleling the 1929 consumption record, the peak year since the

company's founding. Statistical records show that the amount of current required to build the present V-8 is two-thirds greater than that necessary for the heavy production of Model T's during 1924 and 1925.

Preble, Van Deventer Met Section Speakers

The "Met" section of the S.A.E. will stage a transportation and maintenance activity meeting in New York on March 11. T. L. Preble, Tidewater, and F. M. Van Deventer, Cities Service, will be the speakers.

NSPA Moving Offices

On March 1 headquarters of the N.S.P.A. in Detroit will be moved from the Eaton Tower location to larger quarters at 1420 United Artists Building.

The entire working force of your plant may be caught in the grip of Oil Dermatitis. Carried from worker to worker by cutting oils and cutting compounds infected during use, this serious skin disease spreads rapidly . . . crippling production . . . lowering plant efficiency. It costs owners millions of dollars each year.

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Plan to Modify Compliance Certificate Ruling Will Lift U. S. Ban on Ford Cars

Overtures of peace are being made to the Ford Motor Co. by government officials so that government departments may purchase Ford cars and trucks despite the fact that the Ford company does not have a Blue Eagle. The efforts under way also would apply to other companies which have declined to sign the certificate of compliance as provided for by the executive order of March 14, 1934, which made such a certificate necessary in order to sell supplies to the government.

The move toward peace with Ford involves study of the executive compliance order so that it may be interpreted to permit purchase by the government department of Ford cars and trucks without actually requiring the company to sign a certificate of compliance. The company's present policy of complying with the code will be all that is necessary to open the doors to it for government business.

Already some important purchases of Ford trucks have been made, so that the pending ruling will be a confirmation of the new policy of government departments and a

formal and official precedent for proceeding with additional purchases. It is reported the new ruling is in contemplation by reason of plans of the War Department to advertise soon for 2500 trucks. Recent purchases of Ford trucks were made by the Department of Agriculture, which bought 400 while the Interior Department purchased 25.

Because of the importance of the change in policy it is assumed that it was inspired by the President himself and found ready response at the hands of the NRA and other government units. The ruling being prepared is being studied in the office of the Controller General with the assistance of Frank Healy, chief of the government contracts division of NRA. The part, if any, taken by the Ford company, has not been made known.

The first relaxation in the attitude of the government toward the Ford company was announced by an NRA order of Jan. 16 which granted to government departments authority to buy repair and replacement parts for Ford automobiles and trucks now owned by the government without requiring submission of a certificate of compliance with the code from the manufacturer.

Proposed Mass. Law May Require Speed Governors

The Massachusetts Legislature is considering a law to put governors on all new cars, and possibly on some of the old ones. Morgan T. Ryan, former Motor Vehicle Registrar, was one of those who spoke in favor of it at a recent hearing in Boston. Frank A. Goodwin, his successor, spoke against it. There may be compromise legislation allowing the Registrar to require owners who continue to do too much speeding and figure in accidents to place governors on their cars at the direction of the Registrar.

Evans Makes New World Record With Diesel Job

Dave Evans driving his Hemphill Diesel created a new world's record of 125.069 m.p.h. for the straight away mile at Daytona Beach, Fla., on Friday, Feb. 15. Evans' racer was powered with a Waukesha comet head Diesel engine, 5 x 5½, 6 cylinder. The previous mark was 120.33 m.p.h. established by George Eyston, English driver, on Montlhery Speedway last year.

Aircraft Yearbook Ready

The Aeronautical Chamber of Commerce of America, 30 Rockefeller Plaza, New York, will shortly issue two annuals, viz., the Aircraft Yearbook for 1935, which will be the seventeenth edition of this annual, and the Junior Aircraft Yearbook for 1935, which will be a second edition. The first volume is offered

at \$3.50, and the second at \$1.50 per copy. The Aeronautical yearbook covers the activities of the American aircraft industry during the past year, giving statistics, photographs of new planes, an aeronautical directory, etc. The Junior Aircraft Yearbook is intended for model builders and young persons interested in aviation in a general way.

Bendix Corp. Acquires Zenith-Detroit Corp.

The Bendix Aviation Corp. has acquired the Zenith-Detroit Corp., according to Vincent Bendix. Hereafter the corporation will be known as the Zenith Carburetor Company, Mr. Bendix said. The operation of the Zenith Carburetor Company will be continued as heretofore in the Detroit plant of Zenith.

The executive staff of Zenith company will continue to be headed by Victor Heftler, who has headed Zenith since its organization. Mr. Heftler will be assisted by B. W. Westcott, vice-president and assistant general manager. The two companies, Zenith and Bendix-Stromberg, will continue to function as they have in the past, that is, separately, but will be in thorough cooperation. Zenith will take over the distribution of Bendix-Stromberg products in Europe.

Annual Profit and Loss Statements

	1934	1933
Briggs & Stratton Corp.	+\$504,498	+\$252,067
Cleveland Welding Corp.	28,068	42,036
Ex-Cell-O Corp.	104,301	63,118
Gemmer Mfg. Corp.	13,047	32,117
J. W. Watson Co.	302,385	225,446
Houdaille - Hershey Corp.	931,401	113,900
McCord Radiator Co.	27,509	24,757
Sterling Motor Truck.	42,283	.....
Ross Gear & Tool.	248,476	139,091
Motor Wheel Corp.	409,673	122,168

Postpone P-A Hearing

A hearing on the proposed reorganization of the Pierce-Arrow Motor Co. was postponed this week until Monday, Feb. 25, by consent of Federal Judge Harlan W. Rippey, sitting in the United States District Court at Buffalo. The hearing will be held before Judge John Knight, if he has returned from a mid-winter vacation, otherwise Judge Rippey will preside.

Dodge Appoints Newbold

E. E. Newbold has been appointed regional truck manager in the New York region for Dodge Brothers Corp., according to Frank J. Timmens, Dodge New York regional manager. Mr. Newbold will work principally with dealers in developing the commercial car and truck markets.

Close Citroen Offices

American offices of Citroen, located at 968 National Bank Bldg., Detroit, are being discontinued, according to E. R. Frederick, who has been the American manager of Citroen since offices were established here in 1924.

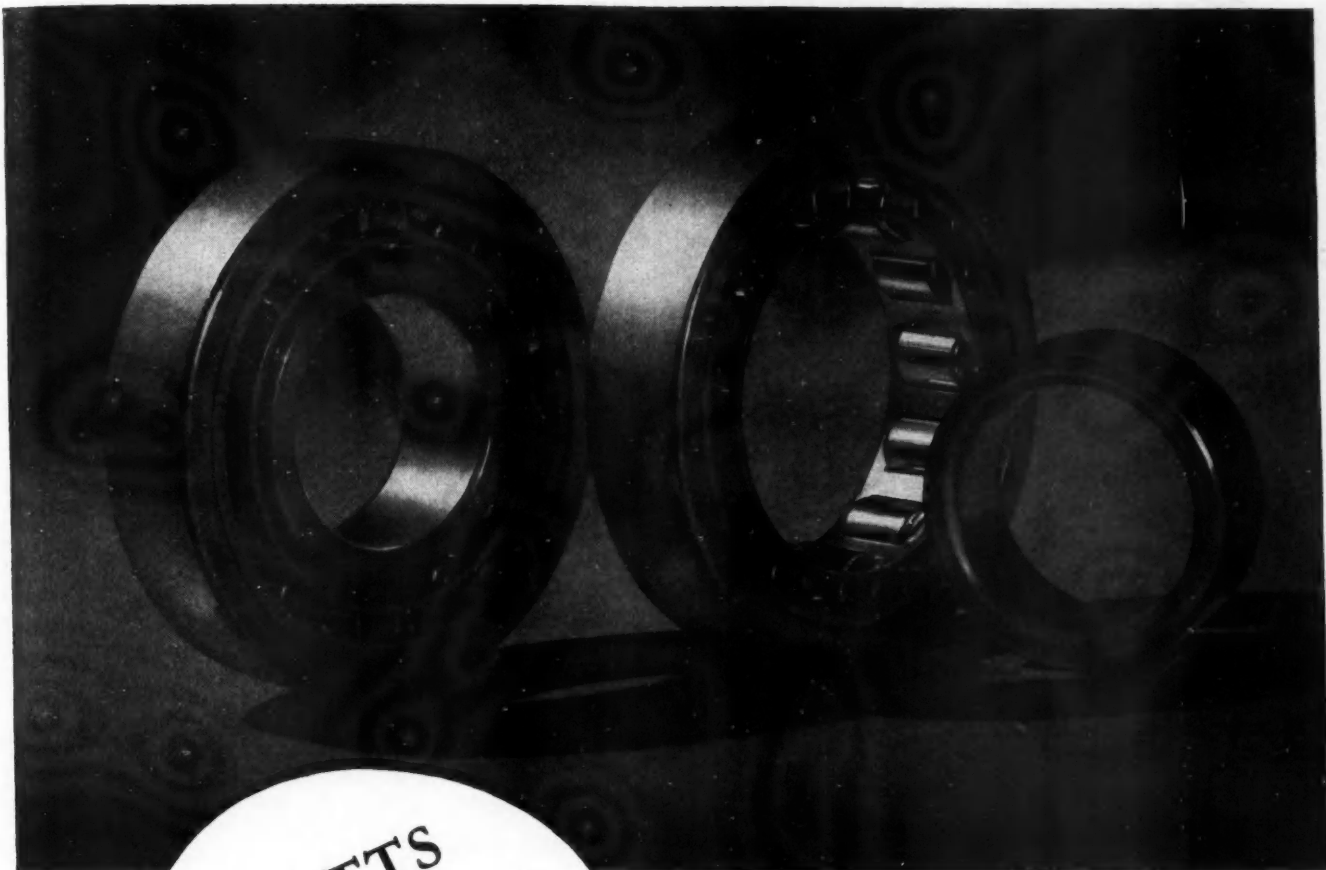
CALENDAR OF COMING EVENTS

SHOWS

Evansville, Ind. Automobile Show.	Feb. 23-27
Des Moines Automobile Show	
	Feb. 25-Mar. 2
Minneapolis Automobile Show....	Mar. 9-16
Mankato, Minn., Automobile Show	
	Mar. 16-23
Machine Tool Exposition—Cleveland	
	Sept. 10-21

CONVENTIONS AND MEETINGS

5th Annual Automotive Maintenance Meeting, Philadelphia	March 5-8
U. S. Chamber of Commerce Annual Meeting, Washington, D. C.	
	Apr. 29-May 2
Lafayette, Ind. (Purdue University), Automotive Service Conference,	
	Mar. 21-22
S.A.E. Summer Meeting—White Sulphur Springs, Va.	June 16-20
American Society for Testing Metals, Detroit	June 24-28



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Automotive Industries

March 2, 1935